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ABSTRACT

Since the mid-1980s, the Organisation for Economic Cooperation and Development (OECD) has carried out a number of studies on the issues of labor market flexibility under the supervision of the Manpower and Social Affairs Committee and its Working Party on Industrial Relations. While much of the previous work focused on the external forms of labor market flexibility, this volume's major focus is on trends in labor flexibility at the enterprise level. The volume consists of three separate articles that present detailed information on the current state of internal labor market flexibility and worker participation in OECD member countries (Sweden, Germany, France, and the United Kingdom). The titles of the articles are: "Labour Flexibility in Enterprises: A Comparison of Firms in Four European Countries" (Bernard Brunhes); "National Experiences in Labor Market Flexibility" (Jacques Rojot); and "Worker Participation in Technological Change" (Wolfram Wassermann). (DB)

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LABOUR MARKET FLEXIBILITY

Trends in Enterprises

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LABOUR MARKET FLEXIBILITY

Trends in Enterprises

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The Socialist Federal Republic of Yugoslavia takes part in some of the work of the OECD (agreement of 28th October 1961).

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NOUVELLES TENDANCES DANS L'ENTREPRISE

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Since the mid-1980s, the OECD has carried out a number of studies on the issue of labour market flexibility under the supervision of the Manpower and Social Affairs Committee and its Working Party on Industrial Relations. While much previous work focused on the external forms of labour market flexibility, this volume's major focus is on trends in labour flexibility at the enterprise level. The volume consists of three separate articles which present detailed information on the current state of internal labour market flexibility and worker participation in technological change in OECD Member countries. They are authored by Bernard Brunhes, human resource management consultant, Jacques Rojot, then Professor of Management Sciences at the Université du Maine, Le Mans, and Wolfram Wassermann, researcher at the Büro für Sozialforschung in Kassel, Germany.

The views expressed in the three reports are those of the authors and do not commit the Organisation or the national authorities concerned. This volume is published on the responsibility of the Secretary General.

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INTRODUCTION

Efficient labour market functioning is crucial to economic growth in general and is particularly important for the reintegration of the persistently unemployed into jobs. Increasing competitive pressures in domestic and global product markets, enhanced by structural adjustment policies which encourage market forces to operate, require labour market responses. The flexibility of labour has therefore emerged as a key policy issue. While it can be examined in markets external to the firm (occupational and geographical mobility, for example), this volume's main focus is on trends in labour flexibility at the enterprise level. As was pointed out in a previous OECD report on the subject [OECD (1986a)], there exists no single model of enterprise labour flexibility. Firms may stress different elements of flexibility: from the external quantitative variant (varying the quantity of employment through hiring and firing) to a functional type of flexibility, i.e. a strategy oriented to the internal labour market involving multi-skilling and reallocating the functions of an existing workforce while offering a large degree of job security.

The choice of approach may depend on the degree and nature of economic uncertainty and the social, legislative and collective bargaining milieu; surely, which single element of flexibility is desired most will depend on a country's traditional mix of rules and regulations in labour markets and industrial relations. Three distinct "models" are sometimes presented:

- In Japan, large firms offer their core labour force strong employment protection and, in turn, expect it to remain internally mobile and adaptable to an extent which is unknown elsewhere, while a principal element of flexibility is provided by the use of subcontractors [OECD (1989)];
- In the United States, employers rely largely on external labour markets, finding it relatively easy to react to changes in demand by varying employment levels. In addition, the country is characterised by traditionally high levels of geographical mobility and voluntary quits. On the other hand, labour-management relations, at least in unionised sectors, are characterised by extensive work rules and seniority arrangements. The type of flexibility American employers seek most is therefore the freedom to deploy labour within the enterprise without union interference and contractual constraints;
- Western European countries have, since the Second World War, strengthened state control over employment relationships and made dismissals more cumbersome and costly. At least in Central and Northern Europe, functional flexibility in enterprises has generally been high; employer demands for flexibility have, accordingly, centered on loosening employment protection legislation and opening possibilities for non-standard (fixed-term, temporary, etc.) work contracts.

Such regional or country models of flexibility types have been the subject of some debate. The juxtaposition of a European and an American model has been questioned by some authors who argue that job security arrangements in Europe are more flexible than is generally assumed, while in the United States, the costs of having to "move" workers within the enterprise according to seniority-based work rules have acted as a deterrent to short-term variations of employment levels; and that the American civil courts have, to some extent, introduced the sorts of constraints on an employer's ability to terminate employment which are familiar in European countries [Piore (1986); Mendelssohn (1990)]. The employment-creating potential of loosening employment protection legislation, for example through greater use of fixed-term contracts, has also been questioned, such as in the case of the German *Beschäftigungsförderungsgesetz* (Employment Promotion Act) of 1985 [Keller (1989); Dombois (1989)]. In the United Kingdom, the hypothesis of a new "flexible firm" manpower strategy, employing a core of stable and skilled workers and an easily discharged outer layer of peripheral workers has aroused considerable controversy, with several authors questioning whether this model has any basis in empirical reality [Atkinson (1985); MacInnes (1987); Pollert (1987)].

The OECD Work Programme for 1987, noting the growing importance of the concept of labour flexibility within enterprises, called for an analysis of the nature and different elements of such flexibility, of the causal factors at work and the implications for public policy. Drawing upon a survey of enterprises in France, Germany, Sweden and the United Kingdom, the first report in this volume, *Labour Flexibility in Enterprises: A Comparison of Firms in Four European Countries*, written by Bernard Brunhes, identifies five main elements of labour flexibility – external numerical flexibility, externalisation, internal numerical flexibility, wage flexibility and functional flexibility – and proceeds to analyse their respective weight and importance for company strategy in these countries. The situation Brunhes describes ranges from a high degree of functional flexibility in Sweden, to a high degree of quantitative flexibility alongside little functional flexibility in the United Kingdom, with France and Germany occupying a mid-way position.

The report stresses as one of its major conclusions, the need for further training and skill formation as a prerequisite for making manpower usage more flexible, thereby ensuring firms' long-term flexibility. As other studies undertaken at the OECD have also shown, skill shortages are consistently cited by employers as being a major constraint on more flexible personnel usage and a more widespread and rapid adaption of new technologies [Vickery and Campbell (1989)]. Finally, the Brunhes report mentions the growing concern about the possibility of creating a "two-tier society" if inequalities are allowed to widen between those who have steady and satisfying jobs and others who switch from insecure employment to the dole and back without ever enjoying job security. This is a concern shared by many who are worried by a tendency to use "flexibility" as a euphemism for the removal of various forms of "security". The Dahrendorf report on Labour Market Flexibility [OECD (1986b)] put it in these terms: "This then is the issue: both flexibility and security are desirable ... it would be wrong to come down firmly on one side or the other. The practical question is how one can strike a balance between desirable job security and necessary labour market flexibility. The answer may well be different in different historical and institutional contexts...".

The OECD used the framework employed in the Brunhes report in a request for information which was sent to the governments of all Member countries. The report by Jacques Rojot entitled *National Experiences in Labour Market Flexibility* summarises the responses by Member countries with respect to the five elements of flexibility identified by Brunhes, and also draws some general conclusions from the information gathered. As major

conclusions, Rojot singles out the implications of new technologies for functional flexibility and employee participation, and the need for further training to develop the qualifications needed in modern technical and organisational systems.

Most observers agree that functional flexibility, i.e. workers' ability and willingness to perform a larger variety of tasks – and management's willingness to let them perform these – is an increasingly important feature of the modern work processes that accompany the introduction of new technologies. However, there is no unique way of introducing new technologies, and they can lead both to upskilling and dequalification, both to enhanced and restricted worker autonomy. A recent experts' group report [OECD (1988)] stressed the need for a change in orientation. The new technologies, it argues, are unsuited to Tayloristic approaches which emphasize fragmentation of jobs and strong vertical control. Their efficient use requires an approach which stresses greater worker participation, a two-way flow of information and investment in human resources.

The third contribution to this volume, *Worker Participation in Technological Change*, written by Wolfram Wassermann, sums up country information on the current status of worker participation in technological change. To what extent can workers and labour unions influence the choice and application of new technologies, with its subsequent impact on the organisation of work, on skills, and therefore on labour flexibility? The overview throws light on the various forms and levels of worker participation practices, ranging from information to consultation, negotiation and finally joint decision-making, which reflect different socio-political traditions and industrial relations structures. As an important similarity among countries, it points to an increasing tendency towards decentralisation of bargaining and participation processes around the introduction of new technology.

BIBLIOGRAPHY

ATKINSON, J. (1985), *IMS Report No. 89*, Institute of Manpower Studies, University of Sussex, Brighton.

DOMBOIS, R. (1989), "Flexibility by law? The West German Employment Promotion Act and temporary employment", in: *Cambridge Journal of Economics*, Vol. 13, pp. 359-371.

KELLER, B. (1989), "Ein Irrweg der Deregulierung: Das Beschäftigungsförderungsgesetz", in: *WSI-Mitteilungen*, May, pp. 274-283.

MACINNES, J. (1987), *Thatcherism at Work: industrial relations and economic change*, Milton Keynes, Open University Press.

MENDELSSOHN, S. (1990), "Wrongful Termination Litigation in the United States and its Effect on the Employment Relationship", in: *OECD Employment and Social Policy, Occasional Papers*, forthcoming.

OECD (1986*a*), *Flexibility in the Labour Market: The Current Debate*, Paris.

OECD (1986*b*), *Labour Market Flexibility, Report by a high level group of experts to the Secretary-General*, Paris.

OECD (1988), *New Technologies in the 1990s: A Socio-economic Strategy*, Paris.

OECD (1989), *Japan at Work. Markets, Management and Flexibility*, Paris.

PIORE, M. (1986), "Perspectives on Labour Market Flexibility", in: *Industrial Relations*, Spring, pp.146-166.

POLLERT, A. (1987), "The 'Flexible Firm', A Model in Search of Reality (or A Policy in Search of Practice)?", *Warwick Papers in Industrial Relations*, No. 19, December.

VICKERY, G. and CAMPBELL, D. (1989), "Advanced Manufacturing Technology and the Organisation of Work", in: *STI Review*, No. 6, OECD, Paris.

LABOUR FLEXIBILITY IN ENTERPRISES: A COMPARISON OF FIRMS IN FOUR EUROPEAN COUNTRIES

by
Bernard Brunhes

I. INTRODUCTION

Most previous OECD studies of labour market flexibility have focused on its external forms, i.e. changes in the labour market and relations between enterprises and the labour market. In contrast, this study investigates the internal forms of labour flexibility, i.e., the way in which enterprises, in response to the economic, technological and sociological changes of the 1980s, are seeking to introduce greater flexibility into their manpower usage.

To analyse internal flexibility, it was necessary first to conduct a study of enterprises in order to ascertain and understand the economic thinking that underpins managerial approaches to flexibility and to examine in detail the methods used, and second, to study developments in industrial relations in the countries concerned in order to find out how they were adapting to the new requirements of flexibility and to what extent they were furthering or impeding it.

The study, the findings of which are set out in this report, was conducted in France, Germany, the United Kingdom and Sweden. The author met senior managers of businesses in each of these countries; the enterprises were selected not so much with a view to constituting a representative sample (since in any case there were not enough of them to constitute one) but on the basis of their efforts to promote labour flexibility. In all, 20 enterprises were visited, sometimes at several levels (for example, IBM-UK managers in Britain and IBM-Europe managers in Paris; Ericsson managers at the group's head offices in Stockholm and in its Stockholm and Gävle factories). In addition, Ministry of Labour officials and representatives of employer organisations and the larger trade unions were also interviewed, except in France where the author was already familiar with their positions. These findings were then checked against, and supplemented by, the findings of a large number of theoretical studies and statistical analyses, together with the concrete experience of enterprises.

Sections II and III attempt to classify the various forms of labour flexibility, and to propose a terminology for them, as the terms currently used are vague and vary from one study, and one country, to the next. Section IV compares the four countries surveyed, which all differ in their approach to flexibility, in their traditions, in their economic and social situation, and in the way they organise their industrial relations.

II. FLEXIBILITY: WHY?

Most enterprises in the OECD countries are today seeking to achieve greater labour flexibility. There are several reasons for this.

Markets are far less stable than they were in the 1950s and 1960s. The reasons for this are well known: rapid changes in consumer products, which soon go out of fashion or become obsolete; technological progress, as a result of which products and especially manufacturing processes change very quickly; the internationalisation of markets, which increases the exposure of domestic production to the world economy; and exchange rate fluctuations that frequently modify the conditions of competitiveness. The scale and strength of competition oblige major enterprises exposed to changing world markets constantly to seek ways of raising productivity and cutting costs. As small enterprises are linked in various ways to major enterprises (they operate in the same domestic markets or are subcontracted to them), they are subject to the same constraints.

On account of the velocity of technical change, the pace of business activities has increased considerably. In addition to the above-mentioned market uncertainties, enterprises need to adjust continuously, often at a speed that the worker finds difficult to keep up with: for example, office workers who have been doing the same clerical work for 20 years or more are being assigned to jobs that require more skill and that change every two or three years as new computers or new communications systems are introduced.

The search for greater competitiveness coupled with the rise in real interest rates prompts corporate managers to hold minimum stocks, or even none at all. Production must therefore be able to respond instantaneously to changes in demand; the successive links in the chain of production must constantly adjust to one another: the effect of a breakdown or a slowdown in the workshop, factory or stores is immediately transmitted downstream or upstream, since there are no stocks to serve as a buffer.

Modern machinery is extremely expensive; in addition, its service life is shortened by technological progress, as a result of which depreciation provisions and thus utilisation costs are higher. Corporate managers therefore seek to increase plant utilisation time, by operating equipment where possible round-the-clock, seven days a week, all year round. As a result, plant utilisation time and employees' working time are no longer synonymous. Continuous shift work and night work are no longer confined to a few sectors. Working time is thus no longer constrained by fixed opening and closing times. In addition to this form of flexibility, which to a certain extent is new, workers are required to work during periods that have traditionally been devoted to the family and to leisure activities; as a result of the introduction of flexible working hours, the way workers organise their personal time and time spent with the family thus becomes more flexible too.

Workers themselves are in favour of a certain amount of flexibility, although the author's observations in the enterprises visited show that employee interest remains limited. However, the examples studied show that there is still little demand for flexible working hours. Thus, in those cases where flexitime has been introduced (with a fixed number of working hours but the possibility of choosing the time at which one starts and finishes work within certain limits), it has turned out that most workers, once they have chosen their working hours, no longer change them. The workers seek essentially two forms of flexibility: the possibility of taking time off from work for family reasons, and the possibility of accumulating leave so as to be able to take long weekends or long holidays.

Labour flexibility is made possible by the introduction of new computer and communications technologies that allow complex systems to be controlled and production to be

rescheduled or switched to a different location. Without technological progress, flexibility would be only wishful thinking; if the progress had taken place 20 years ago, perhaps by now the labour market would have long been very flexible, even though economic conditions did not require it.

Labour flexibility also takes the form of setting wages on an individual basis or of linking them to workers' individual or collective performance. This type of flexibility, which will be touched upon only incidentally in this report, is dictated more by the desire to motivate employees and to create incentives rather than by considerations of flexibility.

Clearly, the level of unemployment and flexibility are directly related. The managers that were interviewed saw them as being linked in three ways: first, high unemployment allows employers to hire workers on contracts that give no job security, or that are short-term, part-time with very few hours, etc. – conditions that workers would not accept in a situation of full employment. On the other hand managers often feel responsibility for unemployment, and their efforts to alleviate it are perceived positively by both their employees and customers. Third, in most countries high unemployment has weakened the trade unions, and thus their scope for action, and increased employers' freedom of action. This is particularly true of France and the United Kingdom.

Employers thus see flexibility as an indispensable response to market uncertainties, dearer money, the increasing pace of business activities and the internationalisation of markets. As one Swedish employer put it: "the head of an international group wishes to be able to switch production locations instantaneously in response to exchange rate fluctuations, while a manual or non-manual worker in the group wishes to live and die in the village where he was born; is it possible to strike a balance between flexibility and employment security?".

III. FLEXIBILITY: HOW?

In the enterprises surveyed flexibility took five forms:

- External numerical flexibility: the number of employees is adjusted to needs;
- "Externalisation": part of the firm's work is put out to enterprises or individuals who are not bound by a contract of employment;
- Internal numerical flexibility: the number of working hours is adjusted in line with needs, but the number of workers remains unchanged;
- Functional flexibility: workers' job assignments are modified according to needs;
- Wage flexibility: labour costs, and thus wages are adjusted.

The principle of *external numerical flexibility* is simple. In the 1950s and 1960s, high turnover and a situation of full employment, leading at times to labour shortages, prompted management to seek ways of holding on to their workers. The period was naturally, for the same reasons, one of strong trade union power. In consequence, contracts of employment giving dependent workers a large measure of, and in some cases complete employment security, and a pay structure based on seniority, were written into laws and collective agreements.

Although perfectly suited to a situation of full employment and steady growth, this system could no longer function under the new economic conditions. Employers therefore

sought the following main changes: more flexible redundancy procedures via amendments to existing laws and regulations and revision of collective agreements; the introduction of, or wider scope for, fixed-term contracts (short-term contracts, temporary work, contracts under which workers are taken on for the duration of a project, possibility of extending probationary periods, easing of the rules concerning the replacement of employees on sick or maternity leave, etc.); and the expansion of various forms of part-time work (casual work, job sharing, job splitting, etc.).

As will be seen later, the trend is the same in all the countries and in all the enterprises surveyed, but the situation varies greatly from one country to the next on account of differences in established legislation, national traditions, the role of the trade unions and the type of industrial relations.

In all four countries, some commentators have voiced concern that the segmentation of the labour market might lead to the emergence of a two-tier society if non-traditional employment patterns continue to grow. There is also some concern about the possibility of a resulting decline in skills.

A major aim of *externalisation* is to replace employment contracts by commercial contracts. Labour law governing employment contracts is primarily concerned with protecting wage-earners' rights; the employer may therefore consider that it places the wage-earner at an advantage; in contrast, commercial law governing commercial contracts places the same rights and duties of the contracting parties on an equal footing: an enterprise is free to choose its delivery times and conditions, to terminate a fixed-term contract and to change suppliers, and to order from a subcontractor the exact number of parts it needs. No collective agreement or trade union action will prevent an employer from doing so, and he will not have to pay surplus workers when business turns down.

What this means in fact is that the risks associated with the uncertainties and fluctuations of production are transferred to another enterprise.

Externalisation can take several forms:

- Putting work out;
- On-site subcontracting (e.g. maintenance);
- Hiring temporary staff from employment agencies;
- The use of self-employed workers.

Of course, all these forms of externalising production have existed for a long time. What is new is that they now may be used to systematically transfer the risks of production outside the enterprise, and no longer merely to make good the skills lacking in the enterprise or to replace workers temporarily. Among all types of flexibility, "externalisation" is the most difficult to measure. It is certainly more common in the United Kingdom than in the other countries surveyed. In the United Kingdom the position is less regulated and the distinction between contracts of employment and commercial contracts is much less clear-cut than elsewhere.

By *internal numerical flexibility* is meant the scope that the employer has for modifying the number of working hours without modifying the number of employees. Such flexible working hours regimes vary greatly from one country to another on account of the wide diversity of legislative provisions and the types of collective agreements governing working hours that exist.

In the United Kingdom, working hours are not set by law; though until recently there were certain statutory prohibitions on night work by women and young people. Unions have relatively little say on working hours, while employers have a large degree of leeway. In

France, the law specifies the number of working hours, but it has recently been amended and numerous flexitime agreements have been signed. In Germany, the agreements signed in the metal-working industry following the major strikes in 1984 opened the way for appreciable progress in the area of flexible working time. In Sweden, working hours are still relatively rigid.

Flexible working time can take several forms:

- Varying the number of working hours with the proviso that an average number of hours must be worked over a specific period, the length of which may vary;
- Flexible annual leave or public holiday arrangements;
- Various systems of shift work (two, three, four or five shifts, permanent night or weekend shifts, etc.).

In all the enterprises surveyed, much imagination is being shown, and extensive negotiations are being conducted in this area. The aim of most managers is gradually to introduce a system whereby the annual number of working hours would be fixed, but an enterprise would be free (within certain limits) to vary the number of hours actually worked; wages would remain constant and independent of the hours actually worked during a particular period, while overtime would no longer be paid but would be offset by fewer working hours at a later date. This, however, is only a long-term objective, a direction in which managers would like to move; numerous obstacles stand in the way of it in practice.

Furthermore, as was pointed out above, because of the high cost of new equipment, plant managers seek to operate it as long as possible, and thus to introduce two, three or even four-shift working, in areas in which it hardly existed before, such as the service sector. To these forms of flexible time-management for full-time workers should be added those for part-time workers. As will be seen, the situation in this area varies greatly from one country to the next. Broadly speaking, alongside permanent part-time work, which is widespread, for example, among women in the Scandinavian countries, a type of flexible part-time work is developing. Employers increasingly see part-time work as a means of varying the number of hours worked. Examples of such arrangements in the distributive trade in Germany and the United Kingdom are given below.

Functional flexibility requires workers to have several skills. The more skills they have, the more easily they can be switched from one activity or job to another. When production requirements change, workers can thus switch tasks, while the total number of working hours remains unchanged.

Functional flexibility serves several aims:

- Multiskilled work teams do not have the drawbacks of Taylorist forms of work organisation; they allow each worker more initiative and variety in his other work and organise tasks more efficiently; they also promote flexibility because they can adapt to changing production requirements more easily than a line of single-skill workers;
- Fluctuations or seasonal movements in production can sometimes be dealt with by switching personnel from one workshop, or even from one plant to another within the same enterprise; this is possible only if employees accept a certain amount of temporary mobility and if they have a sufficient range of skills to adapt rapidly to new workstations;
- Broadly speaking, an enterprise's ability to ride out market and technological changes depends primarily on its ability to redeploy resources in the medium and

long term, and thus to a considerable extent on the ability of workers to change jobs during their working life within the same enterprise. Obviously, to do so they need to have acquired the necessary skills, and thus to have undergone thorough, and as broad as possible, initial and continuing training.

Most of the people interviewed in France and the United Kingdom took "flexibility" to mean "fixed-term contracts", "the ability to lay off workers" or "flexible working hours". In contrast, in Germany and Sweden multiskills, qualifications and especially training were thought to be as important as, and often even more important than, these considerations, reflecting the traditional high priority attached to training in these countries.

Lastly, as regards *wage flexibility*, most of the enterprises visited were seeking to replace across-the-board pay structures (with pay scales, seniority-wage progression, wage levels set by collective agreements regardless of individual performance) by some form of performance-linked system. In virtually all of them, the proportion of the wage that is linked to performance is still small. The only exception is IBM, but there again the situation varies from one country to another, depending on whether there are unions or not in the subsidiary, and on the degree of their influence; for example, there are no recognised unions in IBM-UK, but there are in IBM-France and IBM-Germany. Indeed, the linking of wages to individual performance is an issue that the unions watch very closely everywhere, including in the United Kingdom. Nonetheless, in most cases a proportion, albeit a small one, of the wage is linked to performance in various ways:

- The basic wage is supplemented by an additional payment related to the worker's output;
- The same principle as above but at group or workshop level;
- Performance-related bonuses calculated on the performance of a workshop or plant in relation to targets;
- End-of-year bonuses on a varying basis;
- Profit-sharing schemes.

Although some employers would like to implement further the principle of setting wages individually or of linking them more closely to individual or collective performance, most of the enterprises surveyed did not seem to attach importance to further developments in this area. By and large, wage flexibility is seen as a means of motivating employees and of encouraging them to raise their productivity. However, none of the enterprises regarded wage flexibility as one of the more important elements of their labour flexibility policy. It does not feature largely among the demands of employers' organisations nor is it of great interest to trade unions. Nevertheless, some of the systems implemented in the enterprises surveyed will be described in this report.

IV. A DIFFERENT SITUATION IN EACH COUNTRY

The four countries surveyed differ with respect to their traditions, their system of industrial relations and their current economic situation. From the standpoint of this report, two countries stand out: Sweden, where employers have an extremely narrow margin of

flexibility, and where the unemployment rate is so low that a full-employment situation may be considered to exist; and the United Kingdom, which has few institutional constraints on flexibility but where the unemployment rate has been particularly high. Germany and France are in an intermediate position: Germany is more akin to Sweden in the way it manages employment and industrial relations, but has a much higher unemployment rate; France's unemployment rate now has surpassed that of the United Kingdom, but since the mid-1980s the fairly marked rigidity of its labour market has given way to a flexibility that is much higher than in Germany.

However, the institutional framework is sometimes very different from the real situation: workers may be reluctant to accept flexible working arrangements when they are anxious about the future; firms that offer their employees a clearly mapped out future achieve in practice, and irrespective of the institutional environment, a degree of flexibility that is impossible when workers are unsure about their employment prospects.

1. SWEDEN

THE ABSENCE OF SHORT-TERM FLEXIBILITY BUT A LARGE DEGREE OF LONG-TERM FLEXIBILITY

Swedish industrial relations are based on negotiations between employers and unions at the national, industry and enterprise levels. In principle, the State intervenes only to set out the ground rules for industrial relations. True, the rules are sometimes so precise, and have undergone such major changes, particularly in the 1970s, that the State has played a major role in industrial relations. But in day-to-day practice, the State has a back-seat role. The central role of negotiations between employers and unions is embodied in the law on co-determination and in the labour legislation that has been passed since the war. Nothing can be done in a firm without the agreement of the unions. The relative rigidity described below is thus not the outcome of government policy but of the balance of power hammered out in negotiations between unions and employers. The unions are extremely wary of measures designed to introduce more short-term flexibility. But in a country committed to social consensus, employers are not as vocal as their counterparts in other countries in demanding certain forms of labour flexibility, since they consider that they can dispense with them without placing themselves at a major disadvantage.

Job cuts

In the event of mass redundancies, enterprises are required to apply the "last-in first-out" (LIFO) rule; the unions ensure that this rule is applied, unless there are negotiations to provide special measures of assistance to the workers laid off (early retirement arrangements, training, etc.). This undoubtedly creates a high degree of rigidity. But trade union leaders argue that this constraint makes good economic sense: by retaining the most senior

and oldest workers in enterprises in ailing sectors and by obliging the newest and youngest workers to switch to growth sectors, the necessary switching of resources within the economy is facilitated. However, this argument holds only if the workers who are laid off are given proper retraining. As a trade union leader pointed out, one of the keys to Sweden's success in the area of industrial development and full employment has perhaps been the importance attached to ensuring that young workers in ailing sectors do not find themselves in a dead end, but instead are helped by public and private training schemes to transfer to growth sectors. This policy is all the more necessary in that over the past decade the Swedish population has been characterised to a larger degree than in most other European countries by a small number of young entrants into the labour market, a scarcity that could stunt the growth of the advanced sectors on which the country's economy is based.

However, early retirement schemes do exist, and are well developed, in Sweden; Sandvik (steel industry) made extensive use of such arrangements when it made large-scale job cuts in 1982-1983. "Part-time retirement" is seen as one means of reducing the size of the workforce.

Fixed-term contracts

Swedish legislation and collective agreements limit considerably the scope for using short-term contracts. They are authorised in only two cases: to replace a person who is absent (for example on maternity leave), and who is specifically named in the contract of employment; or for a specific project of fixed duration. In each enterprise the unions ensure that these rules are complied with, and the courts have also interpreted them very narrowly. Fixed-term contracts are common only in certain services, especially in the health and social sectors. Only one of the enterprises surveyed made systematic use of fixed-term contracts – Marabou, a chocolate manufacturer that takes on extra staff every year from August to December to prepare boxes of chocolates for Christmas. The SAF (the Swedish Employers' Federation) would like to amend these rules and the strict interpretation given to them by the courts. But for the moment there are no official plans to move in this direction. On the contrary, fixed-term contracts in the construction and public works sector, in which they were traditional, have been made unlawful as of July 1988.

Working hours

Adjustments to working hours do little to mitigate this rigidity. As a rule, the working week is 40 hours, sometimes 41, and less for two- or multi-shift working. But variations from one week or season to the next are relatively rare. The only scope for flexibility is provided by overtime and some leeway in adjusting the dates of holidays.

Overtime plays an important role: as the country has enjoyed full employment, overtime has not fallen off in recent years as in the other three countries. Several managers – and particularly those of Ericsson Radio in Gävle – considered that over-long working hours would lower productivity, and were thus not very much in favour of them. However, Ericsson has had to resort, along with other methods, and with the unions' assent naturally, to a large amount of overtime to cope with its steeply rising output and simultaneous labour shortages.

Shift work

The amount of shift work varies according to regions and especially according to industries. Traditions are still strong and continue to shape the attitude of unions and workers towards shift work. Officially, the unions are opposed to it and especially to night and Sunday work when it is not called for on technical grounds. They do not consider economic reasons (productivity, competitiveness) sufficient to warrant it, although they do naturally acknowledge the need for it in continuous-process industries (such as steelmaking and paper manufacturing, to take the examples in the survey). Actual practice is more complex. A steelmaker such as Sandvik, located in an area in which it is virtually the only industrial employer, can ask workers to work shifts, even when continuous working is not called for on technical grounds. Workers in the north of Sweden, and particularly those in the timber-using industries, traditionally work on a continuous shift basis, unlike workers in the Stockholm area. In most cases shift work is much better paid than normal day work. For example, Sandvik workers are paid SKr 55 an hour, plus SKr 3 if they work on a two-shift basis, SKr 8 for three-shift working and SKr 10 for four-shift working (i.e. continuous shift working seven days a week).

Subcontracting

It is difficult to measure the growth of subcontracting in all its forms. However, it is certain that in Sweden it is on the increase, but probably at a slower rate than in the other countries surveyed. The law places narrow limits on the hiring of temporary personnel, primarily by virtue of the fact that it can be hired only through the public employment service. Nonetheless, temporary personnel is used, but on a modest scale. The figures for, and the examples of, subcontracting that were given in the enterprises surveyed tend to show that, by and large, it is used when called for on technical grounds rather than as a means of labour flexibility.

Functional flexibility

Functional flexibility is all the more widespread in that the other forms of flexibility are limited. It seems common practice to switch personnel from one part of an enterprise to another: Sandvik does so in response to fluctuations or seasonal changes in its production when these do not affect the entire enterprise. To cope with large expansion in its production, Ericsson Radio brought workers from other plants of the group to its plant in Gävle for a limited duration and at great expense.

Swedish firms, and Volvo in particular, are famous for having been the first large firms traditionally organised on a production line basis to have introduced autonomous work teams. Since then, the other industrialised countries have followed suit and many have less well known but just as successful experiences to their credit. However, the fact that Sweden was first in the field reflects its industry's commitment to seeking methods of work organisation that are the best suited to the needs of workers (autonomy and responsibility) and of enterprises (flexibility).

But it is clear that Swedish enterprises are endeavouring to adjust to economic changes and technological advances primarily by seeking to maximise medium- and long-term functional flexibility: training is seen as the top priority by all enterprises, government

programmes, employers' organisations and unions. This emphasis on training, albeit traditional in Sweden, can be explained more specifically by several factors:

- The relative absence of numerical flexibility reflects the community's commitment to ensuring that its members enjoy a certain amount of job security and stability: in a changing economy this is possible only if workers are prepared to change the work they do, and thus to undergo the training that this entails; employers are accustomed to thinking along these lines, and are willing to promote training, while the government plays a major role in the organisation and funding of training;
- The recovery of the Swedish economy, which made possible a return to full employment, was achieved by withdrawing rapidly and sometimes brutally from declining sectors, and by investing on a large scale in advanced sectors;
- The modernisation of the sectors in which the country was specialised. Thus, the shipyards and many textile factories were closed down in the space of a few years while Volvo, Saab, Ericsson and the paper industry adopted the latest technology and became competitive again in world markets. This required a massive training programme. It may be considered that this three-pronged policy (the rapid running-down of declining industries; shrewd large-scale investment in carefully selected sectors; full training for the workers being switched to other industries) partly explains the country's successful employment record;
- Lastly, the effects of Sweden's steeply declining birth rate are now beginning to be felt in the labour market; priority must therefore be given to training the technicians that industry needs.

In sum, the Swedish example suggests that, in the absence of short-term numerical flexibility, firms may be forced to put more emphasis on personnel planning and training.

2. GERMANY

A RECENT NEGOTIATED MOVEMENT TOWARDS FLEXIBILITY

The major strike in the metal-working industry in 1984 marked a turning point in labour relations in Germany. The unions demanded shorter working hours; the employers were unwilling to go along with their demands, but accepted the mediator's proposal to make working hours less rigid. The strike ended by a compromise: the average working week was cut by an hour and a half to 38½ hours, with actual hours worked to vary between 37 and 40 hours.

By and large, labour flexibility is relatively limited in Germany; there is less than in France, much less than in the United Kingdom but much more than in Sweden. However, since 1984 the situation has been evolving rapidly and, although it is not possible to say today how far it will go, the direction in which it is moving is clear: like Swedish industry, German industry sees large-scale training as a means of achieving long-term flexibility; it also seems to seek short-term flexibility, but slowly since there are still many obstacles in

the way. As in Sweden, the system of industrial relations (co-determination; union participation in decision-making ensured by representation on supervisory boards and by the role played by works councils; the nature of industry-level negotiations and the fairly low profile maintained by the government in industrial relations) is such that this evolution will depend on the balance of power between employer organisations and unions, and their respective intentions.

Job cuts

The law on dismissals, the provisions of collective agreements and the law on co-determination, which give the unions a powerful voice in decision-making, make it extremely difficult to lay off workers: the obligation to give employees notice of redundancy and to consult union representatives, and the fact that the "last-in first-out" principle serves as the basis for negotiations, even though it is not systematically applied, are all constraints on employers' freedom to shed workers who have been in the company for more than six months. As in other European countries, early retirement programmes have been systematically implemented in ailing sectors. Also, more complex schemes have been introduced, such as the "part-time retirement" scheme, first introduced in the chemical industry in 1985: after the age of 58, the employee could choose to work part-time for a wage equal to 75 per cent of his gross full-time wage (in practice nearly 85 per cent net). Options for part-time retirement have recently been extended by law to cover all industries.

Furthermore, enterprises are allowed to introduce, on certain conditions, short-time working (*Kurzarbeit*, equivalent to *chômage partiel* in France) financed by the unemployment fund; to do so, their workload must have fallen off temporarily, for a period of more than four weeks and less than two years (three years for the steel industry). The assent of the works council is required. The system currently covers less than 200 000 employees, but covered many more in 1982-1983.

Such arrangements make it possible, as in most industrialised countries, to shed labour while minimising the number of outright redundancies. But the redundancy procedures are extremely complex and the German employers' organisations have demanded, and have obtained, the possibility of concluding fixed-term employment contracts.

Fixed-term contracts

By an Act of May 1985 (the "Employment Promotion Act" containing a large number of measures to improve the job situation and to combat unemployment), fixed-term contracts were authorised for a maximum period of 18 months under very flexible conditions. The Act is of an experimental nature and is valid until 1st January 1990, although it seems at present that, failing a major political upheaval, the Act will be extended in amended form until the mid-1990s. According to the representatives of the employers' association (*Bundesvereinigung der Deutschen Arbeitgeberverbände*) interviewed, half of the hirings during the second half of 1985, the first six-month period of the Act's implementation, were under fixed-term contracts. A more recent study showed that 56 per cent of fixed-term personnel hired under the Act were eventually accorded permanent employment.

This major legislated change in employment practice seems to have affected mainly small and medium-sized enterprises. Although the large enterprises surveyed welcomed the

new legislation, they do not seem to have changed their recruitment policies because of it, and use fixed-term contracts only when these are considered indispensable. Their caution can be explained by the desire to have a stable well-trained workforce, and also by the misgivings of the unions, who have had ample scope to put forward their point of view under the system of co-determination. For example, Henkel, the chemical group, says that it employs less personnel under fixed-term contracts today than it had in previous years. The Siemens group, while acknowledging that the measure can help to combat unemployment, makes little use of temporary personnel itself. In contrast, MAN, the machine tools and engineering group, sees the Act as offering a solution to the employment problems that it has with short-term engineering projects.

The hiring of temporary personnel from employment agencies is strictly controlled by law (contracts may not exceed three months, and exceptionally six months). The use of temporary employment agencies or outside cleaning and maintenance firms does not seem to be growing. Some enterprises surveyed said that they used fewer temporary personnel than at the beginning of the 1980s. The controversy sparked off by the publication of a study by the journalist Günther Wallraff of the conditions of Turkish immigrant workers seems to have prompted many employers to tread warily in this area.

Working hours

The type of flexibility that primarily interests German enteprises, and that is at the centre of discussions between employers and unions, is greater flexibility in the organisation of working hours. There had hardly been any change in this area until the last few years (although the flexible working day had already existed for a long time). There is a general ban on Sunday working (except on technical grounds), with trade union opposition being strengthened by that from religious leaders. Thus, to get the unions to accept continuous shift working in microprocessor production, Siemens had to show that manufacturing defects arose when the lines were stopped, and that continuous shift working was needed to ensure quality, an argument that the unions accepted.

In the distributive trade, working hours are strictly controlled: as a rule, shops close at 6.30 p.m., at 2 p.m. on most Saturdays and all day on Sundays. Current attempts to ease the regulations by allowing shops to stay open longer on Thursdays have encountered very strong union opposition resulting in strikes. It is true that the managers of Karstadt, the department store chain, that were interviewed were not themselves very much in favour of extending opening hours, as they thought that it would not increase their sales but would push up their costs. However, pressure from consumers and competitors ought to overcome this reluctance.

The trend towards a shorter working week together with more flexible working hours has strengthened since the 1984 agreement in the metal-working industry. This agreement authorised enterprises to vary actual working hours between 37 and 40 hours, from one worker or week to another, provided that the average working week for the entire establishment over a two-month period was 38½ hours. This first step towards a flexible working week did not allow a firm to respond to seasonal changes in production, since the average was spread over two months. It is for this reason that the follow-up agreement, signed in 1987, provides for a further reduction in the working week and a wider range within which working hours can vary, and extends to six months the period over which the average is calculated.

The table below summarises the stages in this process.

		AVERAGE	MINIMUM	MAXIMUM
Before	1985	40 hrs.	40 hrs.	40 hrs.
January	1985	38 ½ hrs. over 2 months	37 hrs.	40 hrs.
April	1988	37 ½ hrs. over 6 months	37 hrs.	39½ hrs.
April	1989	37 hrs. over 6 months	36 ½ hrs.	39 hrs.

This flexibility can be used in various ways: either by varying the number of working hours between time periods; or by operating different working hours in different parts of the enterprise. For example, MAN plants do not operate flexible working hours; working hours are fixed but differ between the departments. In some enterprises the skilled manual and non-manual workers – those who are scarce in the labour market or who require long and costly training – work long hours, while the other employees do the minimum number of hours in order to keep the total number of hours worked by the entire workforce within the permitted average.

Similar arrangements exist in many industries. They have long been traditional in the printing industry and the retail trade (but without the narrow limits on maximum and minimum working hours that exist in the metal-working industry). Recent agreements signed in the timber industry also provide for a margin of flexibility that varies from one region to the other: between 36 and 41 hours in the Rhineland, between 36 and 40 hours in Baden-Württemberg, between 37 and 40 hours in Hesse, etc., with the average being calculated over two months.

These agreements also provide for another form of flexibility: for practical reasons, many enterprises have preferred to continue to operate an 8-hour day, or three 8-hour shifts when they operate shifts. Employees work 40 hours a week, and the difference between the actual and official working week is made up for later during the two- or six-month period at the worker's and/or the employer's convenience.

Agreements providing for a reduction in the number of working hours together with increased flexibility should continue to spread gradually throughout all industries and regions. However, the employers' representatives and the unions differ as to the effect that these measures have on employment. Both see them as means of creating jobs; the unions, however, consider that the reduction in working hours makes possible further work sharing, and thus an increase in the number of jobs; in contrast, employers see flexibility as a means of making their enterprises more efficient and, by the same token, of creating new jobs. Whatever the experts might think, the fortunate convergence of interests concerning the effect of measures combining both shorter and flexible working hours means that a policy that goes some way to meeting the demands of both parties can continue to be implemented.

As mentioned above, the retail trade has already been practising flexible working hours for a long time on the basis of an average number of hours (but without flexible opening hours). Part-time work is also very common in this sector. For example, 33 per cent of the 57 000 employees of Karstadt, the largest German department store chain, are part-timers, often working relatively short hours. In some cases, part-time employees work at specific hours, for example at the busiest shopping times. In other cases, working hours vary and are decided by management; for example, provided that they give two weeks' notice, Karstadt can vary both the days and hours of work. Furthermore, part-time work under 18 hours a week may be encouraged by the fact that it is exempted from certain social security contributions.

Karstadt is also experimenting with part-time contracts based on a fixed wage and a number of working hours that can vary from one month to the next as dictated by the needs of the enterprise; hours that are not worked in one month are simply carried over to the following one. The growth in Sweden of part-time work with flexible working hours has already been mentioned; it represents a form of flexibility that is different from traditional permanent part-time jobs with regular working hours. Karstadt offers an example of this new kind of part-time work in which the wage and the number of hours actually worked are no longer directly related.

To sum up, flexible working hours, which were virtually non-existent a few years ago, are now becoming more common in Germany. As a recent report by the research department of the DGB (German Trade Union Federation) concluded: "the main difference vis-à-vis previous reductions in contractual working hours is that there is no longer a uniform pattern. Across-the-board agreements have been superseded by individual arrangements in each industry or enterprise. The greater possibilities of flexibility have strengthened the existing trend towards flexible work time arrangements." Originally strongly opposed to flexibility, the unions have changed their thinking considerably in recent years. But at enterprise level, their extreme vigilance with respect to flexibility acts as a brake on it. As a representative of the DGB stated: "the unions are not opposed to flexible working hours, provided that they do not merely involve the transfer of risks from the enterprise to the employees".

Functional flexibility

Functional flexibility is very common in Germany in the now well-established form of autonomous work teams; these were introduced much earlier than in France or the United Kingdom. A study published ten years ago in France by the *Laboratoire d'Economie et de Sociologie du Travail* (LEST) of Aix-en-Provence showed the organisational differences that existed between major enterprises in France and Germany: German enterprises of similar size to their French counterparts and in similar sectors had a hierarchical structure that was based less on "command" and a military-type vertical organisation than on a relative autonomy of work teams and on the technical skills of management. The gap between the two countries has closed considerably since then; nonetheless, German industry seems to have been among the first to have followed the Swedish example, and particularly that of Volvo, in introducing autonomous teams of multiskilled workers. This emphasis on work teams has led enterprises to seek multiskills and greater job mobility within the enterprise. Germany's and the Scandinavian countries' lead over the United Kingdom and France (though today the two latter countries are catching up) can be partly explained today by the differences that exist in training systems.

As mentioned earlier, in Germany both employers and employees see training as the main means of achieving flexibility. The rapid pace of technological change, the steep fall in the birth rate and thus fewer young labour market entrants, and lastly the importance that German society attaches to training, contribute to an even higher rating for this priority. All the enterprises surveyed said that they intended to step up their training. For example, Siemens has to cope with major changes in the skills that it requires: in 1962, 33 per cent of its employees were white-collar workers, and 67 per cent blue-collar workers. In 1987, the proportions had changed to 55 per cent white-collar workers compared with 45 per cent blue-collar workers. 25 per cent of its workforce consists of unskilled and semi-skilled workers, compared with 44 per cent in 1962. In one Siemens plant that manufactures components for the motor vehicle industry, the switch-over from an electromechanical product to an electronic product led to an increase in the proportion of skilled workers from 15 to 50 per cent in two years. There are many other similar examples. Even in the retail trade, which does not call for a high level of skills, training is on the increase. Well-trained and adaptable personnel is often seen by the unions, and also by employers, as a means of avoiding excessive job insecurity, what is referred to in this study as "external numerical flexibility".

The need to promote functional flexibility via training is thus acknowledged. But while occupational mobility may be fairly well developed, the same is not true of geographical mobility; all the employers interviewed considered that it was much too low, if not negligible.

Wages

The last type of flexibility – wage flexibility – is also relatively rare. Rigid collective bargaining agreements set pay scales that take very little account of individual performance, much as employers would like to do so. The employers' organisation has not officially espoused *laissez-faire* theories on the need for wage flexibility as a means of responding to changes in the economic situation and of shaking out the labour market. The tradition of setting pay by collective bargaining is well established, and a system of individual performance-related pay would be difficult to implement. Even IBM, which has applied the principle that pay should be related to performance in all the countries in which it has set up, has had to fall in with the usual practice in Germany.

There is also a trend, albeit still a slow one, towards the monthly payment of wages and towards bringing the conditions of employment and pay of blue-collar workers into line with those of white-collar workers. This means that in theory it will be easier to move from one grade or skill to another, and that to a certain extent pay will be unrelated to the hours actually worked; it may also mean that wage systems that still include a piece-work component will eventually disappear. The reorganisation of work that now seems to be under way in German enterprises, as in most OECD countries, replacing traditional production-line methods by autonomous work teams, makes it difficult to award bonuses on an individual basis. The trend is thus rather towards team bonuses awarded on the basis of a team's success in meeting pre-set objectives. But in any case, bonuses make up only a small part of pay, about 5 per cent as a rule.

In the distributive trade, employees receive bonuses in the form of a percentage of sales, calculated when feasible by sales person, otherwise by sales department. This gives an incentive to work harder when trade is busiest. Finally, most large German companies operate some profit-sharing scheme.

By and large, however, wage flexibility is not a very important part of the manpower policy of German enterprises, even if, as in most OECD countries, enterprises seek means of motivating their employees by relating pay to performance and by introducing profit-sharing schemes; the aim is not so much to achieve flexibility or economic adjustment via these schemes as to motivate their personnel.

3. FRANCE

A RAPID LEGISLATIVE MOVE TOWARDS GREATER FLEXIBILITY

Flexibility was a major issue during the 1986 legislative elections in France. Controversial decisions were taken by the newly-elected government, designed to promote a large measure of numerical flexibility by easing redundancy procedures and the conditions governing the use of fixed-term contracts, and by relaxing the constraints on working hours. In fact, this process had already been under way for several years and French firms in many ways already enjoyed greater flexibility than their Swedish or German competitors. But the need for training to achieve long-term flexibility does not seem to be a major issue.

In contrast with Sweden and Germany, the regulations governing conditions of employment and working hours are framed primarily by the government. Ministers of Labour, whatever their political hue, have always backed collective bargaining, and in practice contracts of employment are governed by collective agreements at industry and enterprise level, while the social security and unemployment funds are managed by joint boards consisting of representatives of employers and unions. But the government nonetheless plays a very important role. First, the labour code governing industrial relations is extremely precise; as part of the law, it emanates from Parliament. The use of fixed-term contracts, minimum and maximum working hours, the use of temporary personnel, etc. are all governed by long and complex laws and regulations that provide the framework within which collective bargaining takes place. The measures taken in recent years have thus been enacted by Parliament and decided at a political level rather than by collective bargaining. The State also intervenes via the Factory Inspectorate – an influential body of civil servants belonging to the Ministry of Labour who see to it that the law is enforced and who must be consulted on a wide range of matters.

On the other hand, French unions have much less power at enterprise level than their German or Swedish counterparts, and nothing similar to the Swedish and German co-determination laws exists. Further, for various reasons French trade unions have far fewer members. Also, the various trade union federations do not have a common position on flexibility. For example, CFDT (*Confédération française démocratique du travail*) leaders are in favour of flexible working hours, on certain conditions and provided that they are negotiated, while the CGT (*Confédération générale du travail*) leaders are hostile to the idea. Admittedly, the grassroots do not necessarily espouse the positions of their leaders, and on frequent occasions CFDT branches at enterprise level have been in favour of quite rigid working arrangements, while the CGT unions have signed the more flexible agreements.

For all the above reasons, the driving force behind the move towards flexibility is the State rather than collective bargaining.

The public sector

The French system of employment is characterised by the existence of a large public sector comprising the civil service and related public bodies, local government and local public agencies, and major public enterprises such as Electricité de France (EDF), Gaz de France (GDF), the railways (SNCF) and other monopoly public services run by state-controlled enterprises. In this sector, the conditions of recruitment, promotion, pay, etc. are set out in staff regulations and not in collective bargaining agreements. Furthermore, and this is probably the most important point, these regulations give their beneficiaries virtually total job security. As they say in France, "you need to have killed your mother and father before they will sack you from the civil service or railways".

When studying flexibility in France, it is therefore necessary to bear in mind that there are two very different sectors: a "public" sector in which the regulations rule out any external numerical flexibility and often make it difficult to implement internal flexibility, and a private sector in which flexibility has been growing continually in the past few years. Judged on the basis of the public sector alone, France is the least flexible of the four countries surveyed. Admittedly, attitudes are evolving and changes are currently under way; but the public sector unions cling tenaciously to public sector employment status while policy-makers are tempted to seek flexibility by reducing gradually the number of established employees and subcontracting to private firms public services that were traditionally provided by government departments; more rarely, they seek to create non-established posts that are not covered by the staff regulations.

If, however, the analysis is confined to the private sector, France is seen to have a highly flexible pattern of employment. Hereafter only the private sector will be considered, since the public sector and the changes that it is currently undergoing would require a detailed study by themselves.

In the section on the United Kingdom, it will be pointed out that the current trend in enterprises is towards the creation of a two-tier workforce consisting of a core of permanent employees, and peripheral workers who enjoy less secure conditions of employment. The divide in France is different. As in the United Kingdom, there is the danger of creating a two-tier society. But the divide is not within the enterprise, but between an over-protected public sector and a private sector in which employees are less and less protected.

Job cuts

As mentioned earlier, redundancies are impossible in the public sector. In other sectors, the situation has evolved in recent years. Until 1986, enterprises that wished to make workers redundant had first to obtain the authorisation of the factory inspector, who had to take account not only of the social aspects but also of the economic justification for the redundancies. This cumbersome procedure resulted virtually always in the redundancies being approved, but it took a long time and was viewed by employers as an impediment not only to laying off workers, but indirectly to hiring them: for fear of not being able to lay off workers when they no longer need them, employers were reluctant to take them on when they did need them. This impediment was, however, more psychological than real, since most redundancies were eventually authorised; in fact, redundancies were more frequently authorised than in Germany or in Sweden, but involved a long and costly bureaucratic procedure. At the insistence of employers' organisations, the government therefore relaxed the procedure considerably. As a result, French enterprises can now lay workers off more

easily than their German or Swedish counterparts, which still have to negotiate on redundancies with their labour unions.

In May 1989, following discussion with unions and employers, the French government introduced a Parliamentary Bill which aimed to strengthen existing measures against redundancies. Within the framework of existing procedures, the draft Bill introduces new mechanisms for discussion and prevention of redundancies, among which are: greater joint union-employer control over economic redundancies; establishment of a "social plan" in the case of redundancies involving 10 or more employees in enterprises with 50 or more employees, even where staff representatives are not present; a government right to make suggestions concerning the redundancy plan and a staff representatives' right to be involved in execution of the plan; extended periods of delay, allowing the works council to hold internal discussions and to consult an expert; and finally, at a more global level, the supply of more detailed information to the works council concerning longer-term employment planning and the measures envisaged to prepare the workforce for change (especially training).

Fixed-term contracts

Furthermore, the conditions governing fixed-term contracts were eased in 1986 after having been tightened by the socialist government in 1982. Fixed-term contracts have existed for a long time in French law. Under the decree of 1982, they required the prior authorisation of the factory inspector; this requirement has been abolished. However, fixed-term contracts can be concluded only for a specific task of a limited duration, for training purposes or to replace an absent employee. They may not exceed two years, and can be renewed twice provided that their total duration is not more than two years. As a result of the easing of the conditions governing fixed-term contracts, and particularly the abolition of the need for prior administrative authorisation, the number of fixed-term contracts has risen steeply since 1986. Virtually all the enterprises surveyed said that they recruited new employees systematically, or very often, on fixed-term contracts. In some enterprises all new employees are hired on fixed-term contracts which replace probationary periods. When the contract comes to an end, the enterprise retains the best employees by converting their contract into a permanent one.

Government measures to help the young and the long-term unemployed into work constitute another form of flexibility, since they allow employers to take on unemployed workers for short periods at very low wages and with minimal social insurance contributions. These measures allow enterprises to select employees and in some cases to obtain cheap and unprotected labour.

A decree was also introduced in 1982 to limit the use of temporary personnel; a less restrictive decree was passed in 1986. Conditions governing the hiring of temporary workers from employment agencies are similar to those for fixed-term contracts: temporary workers can be hired only for a specific length of time or to replace absent workers, and for a maximum period of two years. These conditions are much more flexible than those in Germany, where the maximum period is shorter and union control is stricter. Furthermore, in Germany temporary workers must be paid on a permanent basis by the employment agencies that hires them out, which is not the case in France. For these reasons, the use of temporary personnel is much more common in France. However, the enterprises surveyed all said that they used temporary personnel only to replace employees who were away on sick leave or on holiday.

Subcontracting

Increasingly, cleaning and maintenance work is contracted out to specialised firms. These employ immigrant workers on low salaries and insecure terms of employment; in addition, these workers do not enjoy the same social benefits as workers in the enterprises that make use of their services – hence the growth in subcontracting. For example, the SNCF and the Paris Métro contract out the cleaning of stations and rolling stock. Public enterprises whose personnel have their promotion and job security protected by a rigid set of regulations can thus put out this kind of work to firms whose employees do not enjoy the same benefits and thus cost less.

Subcontracting is on the increase in industry and in the service sector, in most cases for technical reasons and because units of production are getting smaller. It also reflects the desire of enterprises to spread their risks. Increasingly, motor vehicle manufacturing firms tend to consist only of assembly plants and design offices. Most banks subcontract the magnetic marking of cheques, a time-consuming operation that requires a large amount of unskilled labour and has to be done at night so that cheques paid in during the day can be cashed the following morning.

As in other countries, it is difficult to say whether the growth of subcontracting is dictated essentially by technical considerations or by the desire to spread risks and to reduce the number of employees. Whatever the reason, the result is the same: a large increase in subcontracting.

Working hours

The average working week fell steadily in France from 1968 to 1981 as a result of the decline in overtime. The statutory working week had been 40 hours since 1936, but in the 1960s and 1970s the actual working week had been much longer, signifying that there was a large amount of overtime. The law required hours in excess of 40 hours to be paid for at time and a quarter, with time and a half over 45 hours. Overtime provided the only margin of flexibility in working hours. As a result of the steep decline in overtime during the 1970s, by 1981 the average working week had come down to the statutory 40 hours; there was thus no longer any margin of flexibility nor scope for reducing the actual working week. Hence the government's decision in 1982 to lower the statutory working week to 39 hours, this measure being regarded at the time as the first step in a process of bringing the working week down to 35 hours. For reasons that had more to do with politics than with economic or management considerations, this first step was not followed by others, as a result of which today it is impossible to reduce further the actual working week since it has once again come down to the statutory working week, or to use overtime as a means of flexibility.

The decree of 1982 which shortened the statutory working week also introduced a certain amount of flexibility into the use of overtime; administrative authorisation for overtime was henceforth no longer required (provided that it did not exceed a certain number of hours).

The current debate on working hours in France and the increasingly numerous adjustments to traditional working hours at enterprise level are prompted more by the desire to operate plants more efficiently than to increase flexibility. As has been seen, equipment is so expensive that enterprises seek to keep it running irrespective of the personnel's working hours, and to operate workshops for longer periods. Two-shift working is on the increase and

many enterprises are moving towards weekend working. There are many examples of so-called weekend working, shifts that work solely on Fridays, Saturdays and Sundays. For far fewer hours (24 hours over three days in some cases), workers are paid as much as those on the conventional 39-hour week. A few years ago the unions were very hostile to this type of practice, but the situation is changing rapidly and systematic opposition to Sunday work is no longer encountered in France. Naturally, these changes are the object of sometimes long and difficult negotiations.

Among the enterprises that have developed original worktime arrangements, mention should be made of the BSN (Boussois-Souchon-Neuvesel) group, which has introduced shift-working in many of its plants; in return, the resulting productivity gains have made possible higher wages.

As in other countries, it is much easier to introduce flexible working hours in new plants than in old ones. The main lesson to be drawn from the numerous experiences with adjusting working hours in France, monitored particularly by the National Agency for the Improvement of Working Conditions, is that the whole issue of working hours should be tackled and solved when investment plans for a plant are being drawn up, and not once it has been completed.

It is still difficult to adjust working hours in line with seasonal fluctuations in production, although the law and the main collective agreements allow hours to be carried over from one period to another within certain limits.

Part-time work

Part-time work has expanded in recent years but is still less widespread than in the other countries surveyed. Except for those in the retail trade, none of the managers interviewed were in favour of part-time work – and even less of job sharing – on account of the extra costs entailed. However, a few years ago the government removed one of the obstacles to part-time work, which was the way in which social insurance contributions were calculated.

Mention should also be made of a recent innovation in French law: the introduction of a new type of indefinite-term contract for seasonal workers who are hired regularly each year. Previously, fixed-term contracts were the only solution, but they left employees who were regularly hired each year without any job security. This new type of indefinite-term contract for only part of the year was introduced at the request of tourist operators and particularly of the Club Méditerranée.

Functional flexibility

Functional flexibility does not pose any problems in principle, the only obstacle to it being that French workers do not show sufficient mobility. While there is no particular evidence that their geographical mobility is either higher or lower than in the other countries surveyed, there seems, on the other hand, to be less occupational mobility than elsewhere. This is particularly the case in the public sector: the civil service, local government, health services and major public enterprises (EDF-GDF, SNCF, etc.). In this sector employees are protected by a body of regulations that base promotion on seniority, classify workers by skills and guarantee job security, thereby creating a high degree of rigidity. Similar rigidities have often spilled over into the major industrial enterprises. But it is the author's view, and that of most of the people interviewed, that the lack of occupational

mobility stems primarily from the inadequacy of training, as a result of which it is difficult for an employee to switch jobs.

Comparison with Sweden and Germany shows the distance that separates managers in these countries from their French counterparts with regard to their attitude towards training managers. One wonders whether many French managers and the leaders of the central French employers' organisation (*Conseil national du patronat français*, CNPF), when they continually demand more short-term flexibility, are not in fact seeking an easy solution to the lack of long-term flexibility caused by the fact that France has not placed sufficient emphasis on occupational training.

Wages

As in Germany, the degree of wage flexibility is low. One of the particular features of France is that no distinction is made between white-collar and blue-collar workers with regard to the frequency with which they are paid: under the law requiring workers to be paid by the month, all full-time employees (39 hours a week) are paid by the month, irrespective of the number of hours actually worked; hours in excess of 39 hours are naturally paid as overtime or compensated later. This system, which is spreading very slowly to other European countries, obviously provides a wide margin of flexibility, but is incompatible with the piece-work that still exists in one form or another in many countries.

A law on profit-sharing of 1986 improved and eased the existing legislation. It was designed to encourage firms to award bonuses on the basis of the performance of shifts, workshops, factories or enterprises, but it has had little real impact. On the railways, a plan to introduce a merit-related system of pay sparked off a three-week strike by the whole network. The entire spectrum of pay structures exists: it ranges from the French subsidiary of Digital Equipment, in which pay is set entirely on an individual basis, through the civil service in which only senior civil servants have large bonuses on top of their basic salary, to the BSN group, whose chairman A. Riboud is opposed to the individual wage. By and large, in business circles there is much talk of setting pay individually, but in practice it is fairly uncommon.

4. THE UNITED KINGDOM

A HIGH DEGREE OF SHORT-TERM FLEXIBILITY

The situation in the United Kingdom differs markedly from that in the other three countries insofar as there are rather few legal or social constraints on flexibility. Contracts of employment are not covered by legal provisions similar to the French labour code. There are neither statutory limits on the working week, nor rules governing the duration of contracts nor detailed redundancy procedures. No legal problem other than a tax one is involved in changing from a contract of employment with an employee to a commercial contract with a self-employed person. The only legal provisions governing hours of work are those that prohibit night work by young people.

This absence of legislative provisions is not currently offset by the industrial relations system: for historical, economic and political reasons, industrial relations and corporate

management are much less based on the systematic search for a consensus between employers and unions than is characteristic of a number of other industrialised countries. While employee involvement and consultation are sometimes well-developed on a voluntary basis, there is, for example, nothing similar to the Swedish or German co-determination system.

Few constraints therefore stand in the way of a high degree of flexibility, be it external numerical flexibility, subcontracting or flexible working hours. However, all the scope for flexibility is not systematically exploited by enterprise, as was confirmed by officials from the Department of Employment.

The duration of contracts

The distinction between fixed- and indefinite-term contracts that exists in the three other countries has no legal basis in the United Kingdom. In principle, employers are free to choose the form of contract that they wish to operate. An employee needs to have been two years with a firm before he or she can qualify for redundancy compensation. An employer is required to give the Department of Employment prior notification of redundancies, and then to consult the trade unions, if any, in the enterprise. However, this is no more than a consultation and the employer is not bound by the outcome. Consultation may sometimes result in some of the redundancies being reconsidered; usually, however, employers seek the unions' agreement on the list of redundancies. But compared with other countries, the procedure is not very restrictive. Employees who have been with a company for less than two years can be laid off without it being necessary for the employer to comply with any special procedure.

The theory of core employment

A number of industrial relations analysts maintain that human resource management in the United Kingdom differentiates between core and peripheral employment, with a core consisting of the permanent, stable, trained and usually skilled workers in an enterprise and the periphery comprising forms of precarious employment, that is jobs that come under the heading of:

- "External numerical flexibility", such as temporary jobs, short-term jobs, youth training schemes, and part-time work;
- "Externalization", such as the various types of contracting out, temporary personnel hired from employment agencies, and the self-employed.

According to this theory enterprises seek to keep the core to the indispensable minimum, the skilled personnel needed to keep the enterprise operating at its normal level of production. Peripheral jobs would include those needed during seasonal periods or surges in production, unskilled jobs, ancillary jobs such as cleaning, maintenance and delivery jobs, or jobs requiring highly specific skills that are not to be found in the enterprise. Such a system would thus allow complete job flexibility.

In the author's view, this analysis corresponds fairly closely to the facts and to the thinking of the managers that were interviewed. It is nonetheless challenged by the Confederation of British Industry (CBI), the employers' association, which fears that it may be suggested that a "conspiracy" exists to create a two-tier society in which some workers would be well paid and others would be condemned to precarious employment. It is also

challenged by the Trade Union Congress (TUC), albeit for the opposite reason: in their view not even the core does, in fact, enjoy a satisfactory measure of job security. Nonetheless, the author considers that this analysis goes a long way towards explaining current developments in the UK labour market.

As noted earlier in respect of France, the United Kingdom is not the first country to start moving towards the so-called "two-tier" society. Japan and France – but other countries as well – had already started to move in this direction before the United Kingdom. But the dichotomy takes a different form in the United Kingdom, since it is within the enterprise and not between enterprises. This type of organisation implies a new form of management. While the core workers receive training and company benefits, and are kept informed, the rest of the personnel may run the risk of being insufficiently trained and to form a sub-category within the company; flexibility might thereby jeopardise company cohesion.

Part-time work

The growth of part-time work has been one of the features of the UK labour market in the past thirty years. It is thus not a recent phenomenon. Also, although part-time work may be insecure, it is not always so: part of the increase in part-time employment since the 1950s has come from the growth in the number of permanent part-time jobs held by women.

Further, only one of the enterprises surveyed used part-time work systematically on a very large scale – Whitbread brewery, which in this way solves staffing problems in its public houses (pubs). The special opening hours that the law imposes on pubs, and the large seasonal and other fluctuations in business with which they have to cope (during holiday periods, local events, or for climate reasons), call for a large degree of job flexibility. Pub managers thus often use extra part-time staff during these peak periods. They are often married women hired on part-time contracts without regular working hours, who are called in whenever the pub needs them. Such a system, which is facilitated by underemployment, would be difficult to implement in other countries because it would not be allowed by the law or collective agreements.

Self-employment

The most striking development in the structure of employment in the United Kingdom has been the growth in the number of self-employed. As mentioned earlier, the distinction between labour and commercial law does not exist in the United Kingdom, as a result of which there is no clear-cut legal distinction between workers who are employed by an enterprise and those who are self-employed but who are paid for the work they supply to the firm and not on the basis of a fixed wage set by collective agreement or by a contract of employment. Enterprises frequently prefer to put out work to skilled workers, even though in reality the work is permanent. In this case, the position of an employee and that of a self-employed worker differs in several respects: first, the self-employed worker may be paid on a regular or irregular basis (depending on the work put out or performed), which introduces an element of flexibility into the enterprise's costs; second, the self-employed worker has no job security, but on the other hand, he can look for other customers; third, social insurance contributions are paid by the self-employed worker and not by the employer.

There has been since 1980 a large increase in this type of work, which has no real parallel in the other countries surveyed; although, of course, unincorporated entrepreneurs exist everywhere, and all enterprises sometimes put work out to self-employed workers or to private consultants. In addition, the more traditional forms of subcontracting have expanded considerably in British enterprises. Because of the corporatism of the unions and the rigidities that used to exist in industrial relations, enterprises had long been accustomed to subcontracting. This trend seems to have increased. All the enterprises surveyed subcontracted a large part of their work.

Working hours

The absence of statutory working hours encourages British employers to seek flexibility in this area also. The first thing that strikes the observer is that, notwithstanding the high level of unemployment, and in contrast with the trend in other countries, there is still a considerable amount of overtime. On some union estimates, for male manual workers working overtime, the average is about ten hours a week. There is obviously a link between this phenomenon and the "core" concept of employment.

However, the enterprises surveyed did not regard this situation as satisfactory, if only because of the excessive cost of overtime. All of them – admittedly selected on the basis of their efforts to improve flexibility – had plans to introduce flexible systems of working time. Broadly speaking, they all have the same objective: eventually to introduce an annual working time or "flexiyear" on which a fixed weekly or monthly wage will be calculated, and to vary the actual working week around an average, with overtime not being paid for as such but made up for later in the year.

A few examples of such systems will be described. The delivery workers of Whitbread brewery are paid on the basis of theoretical, and not actual, delivery times. IBM-UK adjusts the schedule and number of working hours, and the number and frequency of shifts according to needs by means of systems that are sometimes highly complex, and that are worked out in advance before a new plant is started up.

As part of the revamping of its personnel management system described below, Blue Circle, the cement manufacturer, has introduced a fixed monthly wage based on a number of working hours that is greater than actual working hours, so that when it needs to, it can increase the number of actual working hours without paying overtime. Supervisors can ask workers to do overtime when they need them, the number of hours done by each worker being calculated by computer so that all workers remain on the same footing. This system has the advantage of flexibility and, according to the managers, it ensures that workers are not tempted to work more slowly in order to obtain overtime when a particular volume of production has to be met. British Airways uses casual, part-time ground staff that it can call upon at specific times of the day, on specific days or during peak periods.

Pedigree Pet Food recently introduced a system of annual working hours with a fixed salary unrelated to the actual number of hours worked. These can vary throughout the year in accordance with needs, and can be made up for later to ensure that the full number of annual working hours is worked. The maximum authorised working week in Pedigree Pet Food is 60 hours, which is well above that authorised by the law and collective agreements in France, Germany and Sweden. Mars Confectionery has replaced its system of shift-working during specific periods by a system whereby it pays all shiftworkers 30 per cent more than employees on normal working hours, at all times of the year. The shift schedule

is as follows: 3 days of morning work, 3 days of afternoon work, 3 days of night work followed by 3 days off.

The latter two companies are not unionised, and are thus free to set the number and schedule of working hours. At a more general level, the absence of legal constraints and the low-key role played by the unions on this issue gives British companies much wider scope for introducing imaginative and innovative measures than is available to companies in the other countries.

Functional flexibility

Commentators have frequently characterised the U.K. labour market as suffering from too much job demarcation and rigidities, i.e. a low degree of functional flexibility. One important cause of this was held to be the nature of the trade union movement organised basically on craft or job lines. The introduction of modern management methods based on multiskilled work teams encountered the opposition of the unions, who specified which work was to be performed by each trade, the skills required, etc. Once a manual or non-manual worker had been assigned to a particular skill category, it was difficult to switch him to other jobs or to require him to possess several skills.

Today the situation is changing, slowly in some enterprises and more rapidly in others. For example, Blue Circle, the cement manufacturer mentioned earlier, is currently implementing a programme called "Integrated Work and a Stable Income", designed to introduce a large degree of labour flexibility while ensuring that employees enjoy a very steady income and a certain amount of job security. The part of the programme relating to pay and working hours has already been described. It also includes a skill upgrading programme under which each worker must progressively acquire four skills in addition to his basic skill. Employees can thus be called upon to fill posts other than those for which they had originally been trained, including posts with a lower level of qualification, something which in the past workers had found difficult to accept. These measures apply fully only to the permanent employees who keep the company running outside peak periods.

It may be argued that such progress in the area of short-term flexibility has not been matched by similar advances in long-term flexibility, i.e. the level of training and skills. Skill acquisition has long been restricted to a small proportion of the labour force; that suited employers who could reduce training overheads and labour unions who used skill requirements to restrict entry to occupations. In the 1980s public investment in training has increased considerably. The government has recently implemented measures to promote training, in particular by instituting a training guarantee for all 16-17 year old school leavers (Youth Training Scheme, YTS) and by creating the Training Agency within the Department of Employment, as well as an advisory National Training Task Force comprising private sector representatives. Information and advertising campaings are under way to make the public more aware of the importance of training. All the enterprises surveyed considered that training was of major importance. Few observers would doubt, however, that the British economy, like the French economy, is handicapped by the shortcomings of its training system. It may be considered that the short-term flexibility enjoyed by British employers is an indirect impediment to long-term flexibility: insecure jobs do not facilitate the acquisition of skills; trained employees can do a large amount of overtime, which dispenses firms from training new workers; as in France, the youth training schemes often seem to be used by firms as a source of cheap labour, and young people are sometimes alleged to gain little from them in terms of training.

Thus, as has already been pointed out, the countries that have gone the furthest with short-term flexibility may run a greater risk that employers will not pay sufficient attention to the source of their long-term flexibility and efficiency, in other words, to manpower training.

V. CONCLUSION

The purpose of this study was not to collect statistical data but to describe new trends in labour management. It has shown that employers in the four countries surveyed all seek greater flexibility. In all four countries, but to varying degrees, the position of the trade unions is evolving rapidly but the traditions, legislation and the nature of industrial relations in each country lead to a wide variety of situations, ranging from fairly high short-term numerical rigidity coupled with a high degree of functional flexibility in Sweden, to a high degree of numerical flexibility alongside a low degree of functional flexibility in the United Kingdom, with France and Germany occupying a mid-way position.

All the persons interviewed stressed without exception that training was the prerequisite for making workers more adaptable, and thus for achieving long-term flexibility. Increasing emphasis should therefore be put on vocational and further training in OECD countries and the way in which it could help each country to adapt to economic and technological changes.

Many of those interviewed voiced their concern that the growing segmentation of the labour market might lead to the creation of a two-tier society. The problem can be posed at two levels. The first is the political level: is there not a danger that the cohesion of the community will be threatened if inequalities are allowed to widen between those who have a steady, satisfying and well-paid job and those who, often through no fault of their own, drift from one insecure job to the next without ever enjoying job security? The second (the one with which this report is concerned) is the economic level: as training is to a large extent carried out by the enterprise and will probably be increasingly so, peripheral workers or workers in insecure jobs will not receive during their working life the training they need to acquire or to maintain a satisfactory level of skills. There is a danger that individual skills, and the skill stock of the economy as a whole, will decline if governments do not also participate to some extent in training. Finally, the issue of the respective roles of in-company training and external training will require detailed further study.

NATIONAL EXPERIENCES IN LABOUR MARKET FLEXIBILITY

by
Jacques Rojot

I. INTRODUCTION

On the basis of the report by B. Brunhes (in this volume) on labour flexibility in enterprises, OECD Member countries were asked to provide more information on this topic. Using the framework of the Brunhes report, the request asked for information on the following issues:

- External numerical flexibility;
- Practices of "externalisation";
- Internal numerical flexibility;
- Functional flexibility;
- Wage flexibility.

A summary of the information gathered on each of these separate items appears in the report which follows. It is supplemented by some theoretical and empirical considerations, as well as a number of conclusions concerning possible implications for the evolution of industrial relations systems. The number of countries treated in the different sections of this report varies according to the specific information contained in the national contributions.

The report by B. Brunhes makes a number of valuable observations:

- It confirms that flexibility is one of the major concerns of employers in all four countries (albeit possibly for reasons going beyond the ones it describes);
- It presents a convenient typology for international comparisons of flexibility;
- It draws attention once again to the potential dangers of a two-tier society;
- It brings out, in an unorthodox way, the concern felt by all the actors interviewed in the four countries (management, unions and government) about the need for proper workforce training and adaptable skills.

As a general rule, a careful distinction must be made between descriptive and prescriptive studies in the light of the use to which they are to be put. When the aim is to describe a real situation, some (useful and necessary) hypotheses must inevitably be made; reality must of necessity be simplified in order to provide a model which will make it easier to

understand and classify. Such hypotheses help to clarify how things really are. To move from there into the prescriptive realm is, however, a totally different matter. The hypotheses which underpin the analysis must then be expounded, verified and if possible validated, and if they cannot be validated under current theory, this fact and its implications for the hypotheses need to be spelt out.

Before embarking on an analysis of Member countries' replies, and with a view to contributing to a full understanding of their significance, some of the implicit hypotheses underpinning the Brunhes report therefore need to be identified:

- The recent appearance and large-scale adoption, with a view to the efficient management of labour, of a "core-periphery" model at the enterprise level. In this, "peripheral workers" are managed by means of external and internal numerical flexibility, externalisation and, possibly, wage flexibility, while "core" workers are managed largely by methods of functional flexibility, at times supported by some aspects of internal numerical and wage flexibility;
- A two-tier labour market model involving separate primary and secondary markets without connecting points;
- The idea that apparently identical elements (subcontracting, overtime, short-term contracts, etc.) of different industrial relations systems can, even where national differences are identified and taken into account, be treated as similar and comparable outside their national social context and thus be subjected to similar interpretations.

These three theoretical hypotheses, which relate to recent significant developments have not, however, been validated, and are in fact controversial among researchers. In brief, the following points are important:

- It has been claimed that the core-periphery labour flexibility model is in fact incapable of itself explaining reality [Pollert (1987)]. For a start, it is not a new model. For example, French employers invoked the flexibility requirement already at the Grenelle talks in 1936 [Saglio (1987)]. Moreover, some of the evidence which is invoked to illustrate the model, such as the increase in part-time work, may have a different structural origin (the increase in the number of working women, for example). Lastly, while some effects may result from a change in employers' strategies, these may be the product of market strategies and not manpower strategies (subcontracting arising from a decision to concentrate on a specific activity or make full use of a competitive advantage or achieve economies of scale; externalisation related to the introduction of a "just-in-time" production policy involving a redefinition of relations with self-employed workers, etc.). Focusing on labour flexibility in this sense is misleading since it distracts attention from these other types of flexibility – in corporate strategies, in technology, or in product range.
- The theory of the dual labour market, although providing an important tool for theoretical analysis, is not something which all labour economists agree on. It has been contested on a number of scores, not least with regard to its prescriptive value and consequent implications for employment policy [Cain (1976)]. Even for those who uphold the validity of the concept of labour market segmentation, this does not always take the form of a primary and a secondary market (which would correspond to a "two-tier" society), but is rather more complex. The authors of the

theory themselves [Doeringer and Piore (1972), Piore (1975)], before going on to use it as a source of prescriptions for labour market policies at macroeconomic level, noted that in many enterprises an internal market coexisted with a wide-open, external one well before the core-periphery model was elaborated.

- Lastly, and perhaps most importantly, it is not clear that the elements of an industrial relations system can be adequately analysed and understood, still less have prescriptive measures applied to them, outside their particular social context.

An important study comparing the metal-working industries of France and Germany [Maurice, Sellier and Silvestre (1979)] showed that the hierarchy, qualifications, employment structure and division of labour in the enterprises of the two countries were social factors that interacted in ways specific to each society. In particular, an international comparison of hierarchical systems has to relate to the set of social relations at educational, organisational and industrial level, which constitute different patterns in each society: the link between the hierarchical system and the educational system in these two societies is an illustration of this. In a comparison of internal labour markets in France and external occupation markets in the United Kingdom [Marsden (1988)], national differences are shown to depend on a proper understanding of trade union attitudes and labour law structures, including the different nature of the employment contract in the two countries.

II. NATIONAL DEVELOPMENTS

External numerical flexibility

In *Australia*, a number of reforms were introduced in the wake of a report by the tripartite National Labour Consultative Council in 1987. The report concluded that Australia was well above the international average as regards labour mobility and the responsiveness of wages to unemployment and inflation and on a par with a number of other countries as regards relative wage flexibility. For 1988-1989 the government outlined its strategy in a declaration on labour market reform called the Industrial Relations Agenda.

External numerical flexibility is considerable, resulting from both voluntary quits (which are rather numerous) and lay-offs. Concerning the latter, flexibility is limited only by the system of "awards" which incorporate the result of past negotiations and vary in the areas they cover. A number of them lay down conditions governing notice and compensation in the case of collective redundancies. The central arbitration body has drawn up new guidelines for mass redundancy (period of notice extended to 15 weeks and reduncancy pay entitlement for up to 8 weeks) as well as for unfair individual dismissals. However, enterprises with fewer than 5 employees, seasonal workers paid by the hour or day and fixed-term staff are all excluded from the new provisions, which have, in fact, been incorporated in only a very small proportion of awards (6.6 per cent). This may, of course, mean that a certain number of awards already contain provisions going beyond these guidelines.

A marked increase has been noted in recent years in casual and part-time work. Part-time workers represented 10 per cent of employment in 1966, 17.9 per cent in August 1984 and 20.1 per cent in May 1988. Between 1978 and 1988, the share of part-time employees

in overall employment increased from 9 to 15 per cent in the building sector and from 6 to 8 per cent both in public administration and manufacturing. On the other hand, the trend was reversed in communications and remained almost unchanged in the recreation sector.

In 1986, a review of federal awards found that 561 out of 1240 contained scope for casual, temporary or part-time work despite the Federal Industrial Tribunal's policy of promoting permanent employment. Casual and temporary labour and other forms of working without a proper work contract are common particularly in the farming industries, docking, construction and retail trading. Where it co-exists with permanent employment, the awards sometimes impose quotas for such jobs and usually lay down different payment and working conditions. Part-time employment for males was recently introduced into the metal-working industries. Employers strongly favour and unions generally oppose the expansion of these types of employment.

In *Belgium*, an Act of 24 July 1987 laid down strict conditions governing temporary employment contracts and the temporary hiring of personnel. Employers can hire temporary workers only in order to replace absentee workers or for special projects. Contracts may not exceed six months in duration and require union agreement. Individual and mass redundancies are possible, but entail redundancy pay, periods of notice and special compensation which are cumulative and may be costly. Individual dismissals of white-collar employees, for example, may involve a period of notice of up to two or three years.

In *Canada*, a considerable degree of flexibility on the labour market may be deduced from the statistics. In recent years, overall employment has increased and unemployment fallen. The importance attached by Canadian workers to job security may be deduced from the increased number of seniority clauses incorporated into collective agreements (82 per cent in 1988, covering 76.4 per cent of dependent employees). However, the length of time for which agreements are concluded is generally decreasing – a development which indicates a larger flexibility for employers.

Part-time working has expanded considerably. Over ten years – 1976 to 1986 – it increased from 11 to 15.6 per cent of the employed labour force. For an increasing number, part-time work is not the result of a deliberate choice. 71 per cent of part-time employees are women and in general their pay and conditions are poorer than those of full-time employees: 50 per cent of part-time, but only 4 per cent of full-time workers earn less than C$6 per hour; less than 20 per cent of part-time employees belong to unions and less than 10 per cent are on pension plans with employer contributions.

It should also be noted that 6.1 per cent of the agreements in effect in September 1988, covering 4.4 per cent of employees, contained job sharing clauses. A further 1.1 per cent of agreements, covering 1.1 per cent of employees, made allowance for such clauses to be incorporated where desired. The impact of job sharing is, thus, still rather limited. The demand for this type of work and for flexible working hours in general is expected to increase in future because of the larger number of employees having to work while raising a family. The proportion of single-income two-parent families has fallen from 65 per cent in 1961 to 16 per cent in 1981; more than 56 per cent of women with a child under three now work, as against 31 per cent ten years ago, and 460 000 single parents, mainly women, belong to the labour force.

In *Denmark*, between one-fourth and one-fifth of the working population change employment annually, aided by the country's provisions for social welfare. This has beneficial aspects, but is considered to be inordinately high, and creates manpower management problems for firms. Part-time work has also expanded considerably and is now at almost 25 per cent, the highest share of part-time among total employment within the European Community.

In *Finland*, a reform of the law governing employment contracts came into force in 1989. It will improve job security for employees in general and social guarantees for part-time workers in particular.

The proportion of fixed-term contracts has dipped slightly during the 1980s, from 11.3 per cent in 1982 to 10.7 per cent in 1985, a trend found in all the main branches of industry. Fixed-term contracts are mostly found in the farming and forestry sector, where during this period they fell back from 25.1 per cent to 22.6 per cent of wage and salary earners. About one-fifth of the construction workforce in 1985 was also under fixed-term contract. These figures are contested by the trade unions, who believe that the proportion of fixed-term and short-term contracts shows a clear increase, at least in some branches both within industry and in the service sector.

Temporary work increased considerably in the 1980s, mainly performed by students in the evenings or at weekends. The number of part-time employees (defined as anyone working less than 30 hours a week) began to grow in the mid-1970s in all sectors and then levelled out at approximately 8 per cent of all employees in the 1980s. Three-quarters of them are women (12 per cent of female employees, of whom one-fifth work as cleaners and caretakers, and a little over 4 per cent of male employees, of whom one-fifth work in farming or forestry).

In *France*, individual dismissals can take place only on justified and serious grounds and must follow set procedures. If not, compensation up to a maximum of two years' pay may be granted by the courts. An Act of 30th December 1986 removed the requirement of prior administrative authorisation for redundancies. Even before this Act, however, more than 85 per cent of employers' redundancy applications were granted in practice, albeit on a staggered basis. Removal of the requirement has not been followed by a massive wave of redundancies. Statistics show a slight increase over one year, but it is difficult to isolate this factor from business cycle fluctuations.

Part-time work, which represents around 12 per cent of overall employment, may not exceed 32 hours a week. The employee enjoys all the rights granted to full-time workers.

Fixed-term and temporary contracts were regulated in 1982 and 1985, and restricted to a number of specific cases. Their scope was extended again in 1986. In brief, an employer can now make freer use of these contracts, although they may not exceed 24 months in duration even when renewed and employers may not use them for the long-term filling of vacancies connected with the normal and permanent activity of the enterprise. They must be concluded for a specific period, except in a few cases (seasonal workers, employee absences, sectors where temporary work is constantly required).

In the reply from *Germany*, it is noted that the tradition of adapting workforce size to meet changing production needs is still in force, but is tending to be replaced by adjustments in the working hours of a permanent workforce due to the high costs arising from turnover. Statistics show that turnover rates have varied widely – between 6.6 per cent and 83.2 per cent – from sector to sector, with the rates over 60 per cent concentrated in a few sectors, such as hotels and catering, farming and forestry. There is considerable controversy about the impact of the 1985 Act authorising the introduction of fixed-term contracts of up to 18 months. With around 1.5 million workers, less than 8 per cent of the workforce is currently employed on a fixed-term basis.

The number of temporary workers supplied by employment agencies has risen somewhat in recent years, reaching 88 000 in 1988. In contrast, the number of home-based workers seems to have held steady; the 1987 figure was 160 000.

In *Ireland*, around 6 per cent of employees are involved in part-time work, three-quarters of whom are women. This represents an increase of over 50 per cent during the last

decade. It has been suggested that this growth reflects the increase in the number of women in the labour force, the majority of them having freely chosen this form of employment, whereas for men it is mostly a last resort. Between 1983 and 1985 temporary work increased by 18 per cent, involving around 7 per cent of all employees (more than half of them women).

Redundancies increased rapidly from 1980 to 1984, before falling back to earlier, lower levels. In many cases where rationalisation, but not closure, was involved, the trade unions co-operated in the redundancy plans in exchange for additional compensation over and above the statutory entitlements.

In *Japan*, a number of mechanisms serve to prevent fluctuations in business activity from resulting in redundancies: an end to hiring, reductions in overtime, transfers within and between firms, departure of "peripheral workers" (part-time employees, for example) and adjustment of salary levels. The role of subcontractors in this process has frequently been exaggerated, since employment levels do not drop significantly in small and medium-sized enterprises during a recession.

In the declining economic sectors, employment levels have been adjusted by means of the same type of mechanism. Furthermore, economic growth has continued, easing this process as well as the diversification of activities by enterprises. There are no national minimum earnings requirements and redundancy procedures to complicate matters as there are elsewhere, and these factors combine with the lack of skill boundaries and a broad qualification level of the workforce.

In the non-farming sector, the proportion of "regular" employees has fallen slightly but not significantly. The percentages of temporary and day workers have risen and fallen respectively, although exact data are not available. The part-time workforce – already one-sixth of total employment – is expected to grow with the entry of housewives on the labour market and the application of arrangements such as the "loan" of employees between enterprises.

In the *Netherlands*, despite the lack of precise data, there is believed to have been a significant increase in the number of fixed-term and "flexible" contracts (i.e. contracts without a fixed term and without fixed hours, including workers provided by temporary employment agencies) over the period 1980-1985. In 1986, 12 per cent of the labour force was covered by such arrangements (6.5 per cent and 5.5 per cent respectively). "Flexible" workers fall into two categories: 3 per cent with so-called "on-call contracts", "zero hours contracts" or "maximum/minimum contracts" and 2 per cent temporary workers from employment agencies. To these must be added 1 per cent homeworkers.

Flexible-contract workers have little opportunity to gain access to the core of employees. Two-thirds of them have held their flexible job for more than one year and only one-third for more than three years. Furthermore, these workers are normally excluded from enterprise training programmes. Some temporary employment agencies do, however, give vocational training to the workers they employ.

Finally, there has been a spectacular increase in part-time work, from 17 per cent in 1979 to 26 per cent in 1988.

In *Portugal*, redundancy arrangements are inflexible since they must be justified in order to obtain authorisation and since the relevant legislation dating from 1974 is based on the principle of job security and employment stability. There have been rare cases of collective redundancies and of termination of work contracts by mutual agreement, but always with the opposition of the trade unions. However, it is anticipated that a new law of 18 February 1989, concerning the individual employment contract will ease the present

restrictions on redundancies while still guaranteeing a large measure of employment protection.

There are nevertheless a number of numerical flexibility instruments: suspension of contracts by enterprises in difficulty (rarely used, in fact); part-time work; an increase in the use of fixed-term contracts; subcontracting, temporary and casual work; homeworking and the employment of young people under the age of 18.

The fixed-term contract is the most common of these forms of insecure employment and is increasing in popularity, involving around 18 per cent of employees in 1987. The strong employment growth noted since 1987 is largely due to this. In many cases almost all the employees of an enterprise work under this type of arrangement. It is noted that their subsequent integration into permanent employment depends on their qualifications and above all on the needs of the enterprise.

Part-time work is not very widespread, the rate being about 4 per cent. Moreover, 61 per cent of the working population works more than 40 hours a week. Official sources put the average number of hours worked per week at 42. Finally, temporary workers from employment agencies can be found mainly in the service sector, in wood-working and construction.

In *Spain*, an Act of 1984 made it considerably easier for employers to introduce fixed-term contracts (for specific projects or services, for transitional circumstances on the market or in the firm, for the launch of a new activity or as part of a job creation programme). There is also the possibility of sandwich training contracts, of vocational training and so-called "substitution contracts" in which a position is shared by two employees, one of whom is approaching retirement age. Temporary employment agencies, however, are prohibited.

While such contracts represent a sizeable share of new hirings, the improved hiring situation is also due, since 1986, to a general growth in recruitment. Fixed-term contracts are at present estimated to represent some 20 per cent of all employment contracts. Employees hired under temporary arrangements are in general given the same social benefits under labour law as other employees.

It is interesting to note that, according to surveys, approximately 60 per cent of fixed-term contracts are converted into permanent contracts (there are government subsidies for their conversion to indefinite contracts) and that 23 per cent of sandwich training contracts result in a definitive hiring. Once under indefinite contracts, employees enjoy a high level of job security. Individual dismissal is possible only for sound reasons, which are limited in number, and collective redundancy for economic or technological reasons is subject to the agreement of employee representatives or to administrative authorisation.

In 1984 use of the part-time contract was extended to apply to all employees, where before it had been restricted to a few particular categories, such as unemployment recipients, unemployed persons who are no longer eligible to receive benefits, and youths under 25 years old. Nevertheless, it today represents less than 4 per cent of employees.

In *Switzerland*, external numerical flexibility is the rule. The system has always been self-regulating with a minimum of State regulation. The work contract is governed by the rule of contractual liberty. It has, for example, always been possible to hire under fixed-term or short-term contracts. Also, there is no guarantee of continued employment after periods of illness or maternity.

Part-time work (especially in jobs requiring few qualifications) has grown rapidly as more women wish both to work and run a home. New types of employment such as job sharing are being discussed but as yet remain of marginal significance.

In the *United Kingdom*, there has been a considerable increase in part-time work since the end of the Second World War: from 4 per cent of the employed labour force in 1951 to

23 per cent in 1987. The increase in temporary work is less marked, although there are no statutory limits to fixed-term employment contracts. It amounted to 6 per cent of total employment in 1987 (1.3 million), to which must be added the number working on a temporary basis on State-funded schemes, some 400 000 in 1986.

Temporary workers are a heterogeneous group of employees with different positions in the labour market. In fact, core and periphery are not mutually exclusive areas of employment with different types of employee. "Peripheral" employees may well be employed full-time on long-term contracts with a degree of job security. Not all jobs in the periphery are automatically second-rank. For example, in 1986 10 per cent of casual workers and 17.9 per cent of fixed-term contract workers had held their jobs for five or more years entitling them to employment protection if they had worked more than 8 hours a week.

A national picture of the movement between core and periphery is difficult to produce, but small-scale surveys give some idea: 28 per cent of enterprises employing part-time permanent staff said that they had made them full-time over a period of two years. Fourteen per cent of women who had gone to work after the birth of their last child had started to work part-time and were now working full-time. A further 2 per cent had done the same, but decided to return to part-time working.

The initial entry point to the market is an important determinant for future progression. A school-leaver failing to enter a job with formal and extended training at sixteen would find it difficult to do so later.

The extent of employment protection, which has been gradually loosened since 1979, depends on seniority and the number of hours worked. 70 per cent of the labour force enjoys protection, including 75 per cent of full-time and 50 per cent of part-time employees. On the other hand, only about 18 per cent of temporary male and 14 per cent of temporary female workers are protected.

The training given to the flexible workforce varies from industry to industry. Often concentrated in the sectors with generally low training levels, such as personal services, such workers in general receive less training than permanent full-time employees. According to the 1987 Labour Force Survey, 16.2 per cent of male and 14.3 per cent of female temporary workers had received training in the previous 4 weeks, more than in the case of permanent workers (10.6 per cent and 13.9 per cent respectively), no doubt as a result of their mobility.

In the *United States*, the ability of employers to adjust their manpower level in accordance with the business cycle has traditionally never been limited by labour law, although the experience-rating of employers' unemployment insurance contributions has been a minor obstacle. Historically, the only real constraints were employers' fear of losing skilled employees to their competitors and certain clauses in collective agreements guaranteeing job security or unemployment compensation payable by the enterprise. Incidentally, only one unemployed person in four received compensation in 1987.

In August 1988, however, a controversial Bill was enacted requiring employers with 100 or more employees to give notice at least 60 days in advance of their intention either to close their establishments, temporarily or definitively, or to embark on mass redundancies, involving at least one-third of the workforce, but not less than 50 employees, and more than 500 employees in all cases. Lock-outs are excluded from these provisions. Since the Act came into effect only in 1989, its impact cannot yet be assessed.

United States employers have also traditionally sought short-term numerical flexibility by means of overtime rather than by new hiring; this has even reached the point where some workers are laid off while others in the same factory are doing overtime.

However, it now appears that increasingly employers are seeking long-term numerical flexibility by recourse to instruments such as temporary work, part-time work, leasing agencies and individual employment contracts (which are the exception in the United States and have no legislative or collectively bargained status). Some analysts describe personnel recruited according to these procedures as a "contingent" workforce whose employment depends entirely on the employer's volume of activity and who have only second-rate job security, working conditions, training opportunities and promotion prospects compared with the permanent "core" workers. Furthermore, the traditional "understanding" between employers and their white-collar personnel, which assured the latter of job security and virtually automatic promotions in exchange for company loyalty, appears to be slipping under the impact of the recent flood of mergers and acquisitions. White-collar and executive staff are now considered to be a part of the labour force like all the rest who must sell their skills and experience to employers. Aside from the disappearance of company loyalty, this has also resulted in much job insecurity and doubt. This development has certainly led to increased support for the law mentioned above, and its consequences are unforeseeable.

There are no satisfactory statistics on this subject but surveys and estimates suggest that 98 per cent of new jobs are of this type. Data on the temporary industry show that following the 1982 recession such employment increased by 25 per cent a year for the two initial years of the recovery and by 15 per cent a year in 1986 and 1987. This growth is projected to continue into the next century, albeit at a slower rate of 5 per cent a year. Temporary workers are found in a wide range of jobs, many of them requiring a high level of qualification, though many are also unskilled jobs such as labouring. Many of the new entrants have technical or medical qualifications. Forty per cent of them work part-time, which is more than twice the national average.

A survey has shown that 84 per cent of employers surveyed use the temporary employment industry. Fifty-nine per cent also hire individual temporary workers directly, who are not included in the above statistics for the industry. Fifty-seven per cent of employers in the sample report salaries comparable with those of permanent workers while 31 per cent report lower salaries.

As regards part-time work, 81 per cent of employers in a large sample regularly employ staff for less than 35 hours a week. The Bureau of Labor Statistics reports that some 20 million regular part-time workers work thus by choice. In the 1970s this number had increased because of the massive entry onto the labour market of women and young people; then, at the start of the 1980s, the number of involuntary part-time workers who could not find full-time employment almost doubled. By 1988, it had fallen back to 5.2 million, which is still a historically high level. Almost 80 per cent of non-agricultural part-time workers are employed in services and retail distribution.

Part-time workers enjoy only limited benefits compared with full-time employees. Seventy-five percent are paid the same wage but 16 per cent receive less. They are usually not on retirement plans. Only 44 per cent have health insurance, 36 per cent life assurance, two-thirds have paid holidays and 42 per cent paid sick leave (as against almost all full-time employees).

Externalisation

In *Australia* it is noted that apart from the widespread use of casual, temporary or part-time workers, the building industry makes very wide use of subcontracting.

In the answer received from *Belgium*, externalisation is defined as the replacement of an employment contract by a commercial contract for the performance of certain tasks within the enterprise. This type of contract, whether concluded with physical persons or enterprises, is used only fairly rarely and for specific tasks (cleaning, transport, meal distribution, high-tech maintenance, etc.).

There has been a substantial increase in subcontracting in all industrial branches in *Finland*; in the metal-working industry, for example, subcontractors account for one-fifth of industrial output. Local authorities, too, have privatised part of their public services, especially maintenance.

This trend is reflected in the growing number of small enterprises: between 1979 and 1984, the number of enterprises with fewer than 20 employees increased by 540, whereas the number of larger enterprises remained unchanged. The main industries concerned were metal-working and timber.

There was an increase in the number of self-employed in the 1980s, from around 8 000 in 1980 to more than 18 000 in 1987. This contrasts with a fall of about two-thirds of the number of self-employed in agriculture since 1950. Finally, according to the 1985 census, about 60 000 people, equivalent to 2.6 per cent of non-agricultural employees, work at home.

In *Ireland*, many collective agreements specifically incorporate the employer's right to opt for subcontracting, normally in consultation with the trade unions concerned. Recently a few employers have, also after consultation, changed the status of some of their employees from salaried to self-employed. Sample surveys suggest that some 14 per cent of firms in the manufacturing, construction and services sectors employ workers on a subcontracting basis. The number of jobs carried out under subcontracting is probably lower than 2 per cent of all jobs.

Several forms of externalisation are common in *Portugal*: highly specialised enterprises often employ other enterprises or self-employed workers in the fields of data processing, auditing, etc. The building industry has systematic recourse to self-employed workers working alone or in teams for some piece-work such as painting or floor covering. In the clothing industry, some firms cut their costs and absorb market fluctuations by employing almost solely apprentices and youths under 18, who receive low wages and work long hours. Nevertheless, this practice is restricted to a handful of enterprises in the northern part of the country and is being vigorously opposed by the administration. In the clothing, leather, shoe, toy, lace, timber and furniture industries homeworking is widespread and may be organised into small family production units.

In *Spain*, there is a long established tradition of subcontracting, which is widespread in sectors such as building, where it has always existed. Furthermore, it now appears to be spreading to all sectors for certain specific activities (cleaning, maintenance, security). There is also a growing trend for companies to subcontract phases of their production processes to smaller enterprises, often a subsidiary of the principal firm or linked to it in a group of enterprises. The ban on temporary employment agencies is regarded as an indirect cause of the expansion of subcontracting and of fixed-term contract work. National legislation in Spain provides certain guarantees for the employees of contracting firms, and requires the main enterprise to guarantee salaries and social security benefits.

All forms of externalisation are found in *Switzerland*. Subcontracting, including on-site subcontracting, is common. A large company, for example, encourages its employees in some of its sectors to set up their own businesses, legally independent but economically supported, at least in their early days. Little information is available on the self-employed, but what evidence there is suggests that some employers conclude commercial contracts

with individuals so as to avoid being subject to the provisions of labour law. Finally, hiring of temporary staff from employment agencies is widespread and there are no regulations governing such agencies, although a bill is pending. Overall, employee leasing accounts for 0.3 per cent of hours worked.

There are restrictions on subcontracting in the majority of major collective agreements in the *United States* covering two-thirds of employees under major agreements; however, a total ban applies only to 1.5 per cent. The practice is therefore widespread, though its exact extent is difficult to determine. However, a survey by the Bureau of Labor Statistics covering four manufacturing industries which increased output whilst reducing their workforce showed that most enterprises in these industries had subcontracted certain activities. In most cases, subcontractors providing payroll, data processing, haulage or cleaning services were involved. Also, a growing trend towards subcontracting activities normally carried out by skilled white-collar employees has led to the rise of the "business services" industry involving a range of enterprises of all sizes, the largest of which, the Troy Group, had a turnover of $135 million in 1987 from providing engineering design services for the car industry.

It is even possible to lease an entire temporary workforce for the duration of a commercial contract. A newsletter by the leasing industry reported that the number of employees working under these conditions had grown from 5 000 in 1982 to 310 000 in 1987. Small enterprises are the most frequent clients because of the opportunity to cut staff costs, the tight labour market situation, the better conditions which can be offered to workers or other particular needs. Large firms have also used this option in some pilot locations.

Internal numerical flexibility

Australia does not regulate working hours by law. Where awards apply, however, they have the force of law. The general nine-to-five "business hours" standard still applies. However, in practice a wider latitude for working hours is prescribed, so that actual hours worked can be arranged with some flexibility. Usually, employment of labour outside these working hours entail additional costs for shift work, overtime or weekend work. Furthermore, a number of restrictive labour practices impede flexibility, such as a minimum overtime guarantee per week and guaranteed pay irrespective of hours worked.

In the framework of the two-tier wage system described in the following section, a number of agreements provide for more flexible working hours in order to make better use of the means of production. Other experiments have also taken place, particularly with a view to continuous production. For example, in the hotel industry the working day is 7 a.m. to 7 p.m., with payment at the normal hourly rate and scope for interrupted hours. In many cases, rest days are taken in periods of lower output where overlapping shifts can continue production during the breaks. The current restructuring of the awards system will provide further reforms in the organisation of working hours.

The reduction of working hours viewed as an employment policy instrument has been the focus of relations between the social partners in *Austria* since 1983. The union objective is the 35-hour week for all without loss of pay. This has already been achieved in the printing industry, and has since then been extended to some 600 000 employees, with, as preliminary studies have shown, a visible impact on employment. The trade union federation aims first at a national collective agreement, followed by legislation on reduced working hours; however, it runs into equally determined opposition from employers wishing to

promote flexibility in working hours. The labour unions regard some working time adjustment measures such as "flexitime" as positive for employees, provided that protection is provided under law or collective agreements. However, they strongly resist arrangements such as capacity-oriented variable working time which, in their view, jeopardises acquired social rights.

In *Belgium*, working time is fixed by law at 40 hours per week and 8 hours per day. It is usually reduced to between 35 and 38 hours weekly by collective bargaining. However, there is some flexibility: collectively bargained flexible hours, provided that certain conditions are met, can add two hours to the working day up to a limit of nine hours and 5 hours to the working week up to a limit of 45 hours. Such hours worked over the normal maximum are recoverable but not paid as overtime.

A 1987 Act, and a subsequent collective agreement which has been made generally binding by decree, provides under specific conditions for collectively bargained exceptions, within certain ceilings, from the regulations on Sunday rest, the ban on night work and public holiday work, etc.

In *Finland*, three-quarters of employees have jobs with normal hours, 9 per cent work in two shifts (above all in hotel and catering services), and 6 per cent work in a three-shift system (accounting for 9 per cent of industrial employees, primarily in the paper, food and chemicals industries, where approximately 50 per cent of employees work in shifts). Regular evening, morning or night work is done by 3 per cent of all employees. In recent years, there has also been an extension of the amount of permanent weekend work in industrial establishments. Part-time workers are the least likely to enjoy normal daytime working hours. In 1985, 42 per cent of those who work less than 20 hours a week worked regularly during mornings, evenings or at night. Lastly, the ban on nightwork by women has been lifted by law.

The average working week on 1st November 1986 was 40 hours. The 1986 national income policy agreement included a reduction in industry working hours. Sectoral agreements provide for a gradual reduction to 37.5 hours a week in 1990, after annual reductions of 16 hours in 1987, 1988 and 1989 and 20 hours in 1990.

In *France*, after amendments in 1986 and 1987 and following agreement at branch or enterprise level, the length of the working week can be varied, under certain conditions, over part or the whole of the year on condition that it does not exceed an average of 39 hours a week over the year and that overtime is counted annually.

Nightwork by women is no longer completely prohibited. Intermittent employment was also permitted in 1987, so that it is now possible under an indefinite work contract to alternate working and non-working periods without interrupting the contract. The possibility of substitute weekend shifts was also introduced.

In the process of reducing the number of weekly working hours in *Germany* since 1984, flexibility in individual working hours has been introduced at enterprise level by means of a number of contractual provisions. In the metal-working industry, for example, three options or a combination of all three are now possible:

- An employee's individual working week may, since 1st April, 1989, vary between 36.5 and 39 hours provided that an average of 37 hours is observed for the workforce as a whole by the enterprise;
- The individual's normal weekly work timetable can be divided unequally over weekdays or from one week to another, provided that on average the duration of the normal working week is observed over a period of six months.

– An individual may continue to work 40 hours a week, the reduction in working hours being taken in the form of additional days of leave.

In 1986 two parallel surveys were run of 2 000 firms in the metal-working industry, one by the union and one by the employers' association, with substantially the same results. The union survey found that the first of the above options, as outlined in the initial agreement of 1984, had been chosen by 10 per cent of enterprises, option 3 by 35 per cent and other variants, for example, a general reduction of hours worked on a given day (usually the Friday), by 82 per cent. Option 2 was not mentioned in this survey.

In the employers' association survey, the first option was chosen in 17 per cent of enterprises, the second in 50 per cent and the third in 75 per cent. Combinations of options 1 and 3 had been introduced in 37 per cent of enterprises and other variants in 83 per cent. The percentages add up to more than 100 per cent because several options could be chosen by different establishments within the same enterprise. The options are in fact set out in agreements at establishment level; as a result, they have not been recorded at Federal level and no government information is therefore available regarding their contents. However, a survey of working conditions by the Labour Ministry found that at the end of 1987, 50 per cent of collective agreements provided for a normal working week of under 40 hours.

Furthermore, it is estimated that at present at least one-quarter of employees covered by collective agreements work under some type of flexible arrangement. The Federal Government regards this development favourably since it uncouples labour hours from machine hours and thus has beneficial effects for enterprises in terms of costs, and for employees too. This trend could be reinforced by reorganisation of shift work and Saturday working, which will involve more part-time contracts. As regards the level of qualification of the employees concerned, studies by the metal-workers' union suggest that the flexible work options apply particularly to lower qualified workers.

In *Ireland*, wage agreements associated with the 1988 Programme for National Recovery provide for discussions at national level with a view to reducing the working week by one hour for anyone working 40 hours or more. The need for flexibility will be one of the factors taken into account in the discussions. At the moment flexible working hours are found mainly in the public sector.

In the *Netherlands*, the average number of overtime hours worked, which fell between 1979 and 1982, has been rising again since then, proportionately more strongly in small enterprises. In October 1986 11 per cent of employees worked an average of 5.1 hours of overtime, mainly men employed full-time in industry and transport. It is rare for working hours to vary other than by overtime to meet production needs, since the normal working week is fixed.

The situation in *Portugal* is marked by the systematic use of overtime within the limits of two hours a day and 160 hours per year, by the use of part-time workers and the introduction and variation of shift-work (for example, fourth and fifth shifts in textiles and electronics). The tourism industry offsets the extra hours worked in the high season, such as public holidays, rest days and even overtime, by giving staff time off out of season, as is for example the case in the Algarve region which has a large tourist trade. Overall, the tourist trade also depends, to a large extent, on seasonal labour.

Many innovations have been introduced in *Spain* since 1980. It is now possible to establish working hours on an annual basis by collective bargaining and to spread them irregularly over this period, the only constraints being the compulsory observance of the weekly rest period of one-and-a-half days and the rest between working days of 12 hours.

Since 1986, the ceiling on overtime has been calculated on the basis of an annual total and may be offset, by collective or individual agreement, by additional rest periods instead of additional pay.

The regulations governing working time and rest periods are relatively flexible in *Switzerland*. Flexibility results from the difference between the theoretical legal ceilings (45 or 50 hours) and the real contractual ceilings. The law implicitly authorises certain forms of working time adjustment, shift work, night work and Sunday working. Adjustments of working time at the expense of normal daytime work hours are subject to authorisation, which is given particularly for economic reasons.

Employers' associations call for more flexibility in this field, but are opposed by the unions fearing the subordination of labour to profit and calling in their turn for reduced working hours, longer holidays, a lower retirement age, and the adjustment of working time to individual needs.

Changing the regulations to make working time more flexible is currently the subject of thorough debate, particularly in connection with ending the ban on nightwork by women.

Internal flexibility in the *United Kingdom* varies much more than external flexibility by establishment and is thus much more difficult to document comprehensively. Small-scale studies can nevertheless give some clues. A variety of options exist at enterprise level such as shortening the working week or increasing annual holiday.

In a 1987 survey, 3 per cent of the enterprises surveyed, mainly derived from the manufacturing industry, had introduced annualised working time arrangements in the last three years. A recent study found that 8 out of 10 manufacturing enterprises which had increased their internal numerical flexibility had changed their shiftwork arrangements.

The 1987 New Earnings Survey shows that white collar employees in all industries (with few exceptions) regularly work fewer than 40 hours a week. However, if overtime is included, male manual workers work 44.5 hours a week. The continuing role of overtime tends to prove that the introduction of internal numerical flexibility is very gradual.

In the *United States* the unilateral changing of hours worked is a right jealously guarded by employers. Overtime is subject only to the time-and-one-half pay provisions for periods worked over the 40-hour maximum laid down by Federal law. Most collective agreements provide for further increases beyond a certain number of hours per day. However, only 20 per cent of the employees under major contracts have the right to refuse overtime and 9 per cent have job or income protection in the event of a reduction in hours worked.

The various numerical flexibility procedures – both external and internal – as well as externalisation itself, entail fundamental changes in the labour market. This is not because they are new, since they have been applied for a long time, but because they are no longer used solely to meet short-term requirements but are part of long-term human resource flexibility strategies.

Since unions now put greater emphasis on job security than on pay rises, employers have generally chosen to protect a core of employees from labour market fluctuations by employing a group of contingent workers – part-time, temporary or subcontracted workers – instead of linking pay with the performance of the enterprise. Only a few have successfully combined these two options.

Although some analysts are concerned at the risk of a secondary labour market arising for those workers who lose out because of these policies – a risk which must be taken seriously and monitored – it nevertheless seems that these alternative labour markets are not without their uses.

Many of the workers in the contingent labour force are highly qualified and would be employable on the primary market. It therefore suits some of them to remain where they are: for example, people whose link with the labour force is loose, such as students, housewives and retired people; they may be in a transitional phase of entering or leaving the market (students or semi-retired people); or they may be trying out a job before embarking definitively on a career.

In a society in which leisure and flexibility are highly prized, the secondary market can have a very positive impact. The questionable aspects concern the ability of individuals to freely enter the primary market, whether points of access are open to anyone with the right qualifications and the acquisition of the necessary qualifications by those who do not have them. The secondary market can facilitate the later entry to the primary market of young people, members of minority communities or anyone finding difficulty in getting a first job. It could perhaps be used as a means of retaining in the labour force older workers who are at present leaving it in disproportionate numbers. Labour unions also have a role to play in determining transfer rights between the two markets or even in making the secondary market a more attractive sector for long-term employment.

When employers want to strengthen their competitiveness, it is likely that more flexibility will be required of all employment relationships, including those in the primary labour market. Some employers already conceptualise job security as the guarantee of a job and not of a given post, and thus subject to mutual commitment to job mobility and to training and updating of skills. This constitutes a major challenge for educational institutions which must give employees not only their basic qualifications, but also the capacity to benefit from their education throughout their lives and to train and adapt permanently so as to maintain their individual labour market competitiveness.

Wage flexibility

In *Australia*, a two-tier wage system was introduced in March 1987 with the support of the government and the main employers and unions; the aim was to move from an indexation arrangement to a mechanism incorporating negotiation at industry and enterprise level and encouraging productivity improvement. This system was a significant move in the direction of a joint effort to step up flexibility. The subsequent industry-wide and enterprise-level agreements incorporated a range of measures allowing more flexible use of manpower and eliminating restrictive practices. In 1988 the system was reviewed and replaced by another system with identical objectives which aims to revise Australian award structures.

The two-tier wage system has, in pure wage terms, represented a move towards decentralising wage negotiations towards industry and enterprise level, but within centrally imposed constraints. It has provided a method to give special attention to particular sectors or enterprises and adapt the wage system to productivity and efficiency requirements.

With the new wage-setting system, wages will play a growing role in microeconomic changes; it is expected that award restructuring will entail new job classification and payment systems at industry and enterprise level.

In *Belgium*, wages are laid down by contractual agreements between employers and workers, within minimum levels established by collective bargaining at national and industry level, which take into account qualifications, length of service and age. Ninety per cent of these agreements have salaries indexed to the cost of living. Bonuses linked to performance or productivity of the enterprise are found, but only rarely. In principle, the trade

unions oppose bonuses linked to individual performance. Some enterprises offer them informally, but outside of the official wage agreements.

In *Canada*, the collective bargaining system by which wages are fixed has been very sensitive, in terms of the rate of change in the main wage agreements, to the changes in the economic climate in the 1980s (which largely parallel changes in the consumer price index). Salaries have risen, but somewhat less than the cost of living.

In the centralised national income policy context of *Finland*, there has nevertheless been a drift in wages at enterprise level. In the private sector and in particular in industry, there is a growing tendency to link pay to performance, and within local government an incentive wage scheme was introduced in 1984, with rather mixed results. A bill currently in preparation provides for employee shareholding for profit on a voluntary basis.

In 1985, 27 per cent of workers were paid by the hour, 60 per cent weekly or monthly and 8 per cent for piece work. Only 10 per cent of office workers were paid hourly, as opposed to almost 50 per cent of manual workers.

In the opinion of the *German* government, the problem of greater wage flexibility applies particularly to sectors where, despite structural economic and employment problems, collective agreements continue to be concluded on the model of the prosperous sectors. The high unemployment rate and the structural problems of some branches, for example the shipyards, are such that greater differentiation according to region and qualification is needed.

However, the Federal Government respects the autonomy of collective bargaining and has merely made an appeal to both parties. It should nevertheless be noted that the conclusion of the sometimes very moderate agreements in recent years has, among other factors, reduced the need for wage differentiation.

The element of flexibility introduced in *Ireland* by linking pay to productivity or to individual performance and the few cases of profit-sharing and annual bonuses are regarded above all as ways of motivating employees.

A further, recent element of flexibility has been the introduction in some enterprises of a two-tier wage structure with lower pay and poorer conditions for newly hired workers.

In *Japan*, the widespread system of the bi-annual bonus has the threefold role of providing a regular supplement to normal earnings, participation in the profits of the enterprise and motivation, partly depending as it does on merit. It contributes to overall wage flexibility, since bonuses vary according to profits and the business cycle, but its impact is not all that great.

Whether or not nominal or real wages are flexible in Japan is an open question for Japanese economists. It is, however, certain that the rate of wage increases has remained stable since the mid-1970s and that wage trends have constantly reflected labour market conditions.

In *Spain*, collective bargaining was until recently guided by the main centralised national agreements where the emphasis was placed on quantitative salary increases. Salary structures were not negotiated and remained little changed. There has been no significant increase in the proportion of wages linked to individual workers' performance. However, several enterprises are known to have experimented with linking earnings to productivity. Some surveys have found that employee bonuses amount to around 15 per cent of total earnings.

In the *Netherlands*, it is felt that there are clear indications that employers are looking to increase wage flexibility by negotiating temporary rather than structural increases and by paying bonuses in order to offset the shortage of skilled manpower. In *Portugal*, too, wage flexibility (merit, hard work and productivity bonuses) is used as a means of motivat-

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ing the workforce rather than as an instrument for controlling production costs. Potential wage flexibility in *Switzerland* is practically unlimited. The collectively agreed floors are often much below real wage levels and the determination of real wages is governed by the principle of contractual liberty. It is, therefore, entirely possible to link salaries with employee performance.

Up until several years ago in the *United States*, collective bargaining severely limited wage increases and the agreements reached could be seen as union "concessions". In addition, a two-tier wage system evolved in which newly hired personnel received lower wages than existing workers. These systems have now been or are about to be removed. In some cases manpower cutbacks were "exchanged" for greater influence in the enterprise's management (for example by labour union representation on the company's board of directors).

The real legacy of this period has been the permanent setting aside of an automatic wage increase formula based on the economy's average historical growth of productivity, coupled with a cost-of-living adjustment factor, all of which were incorporated into the basic wage rate. The new trend is for flat-rate increases not incorporated into the base rates coupled with modest cost-of-living adjustments, frequently used to offset the growing cost of social welfare. These modest increases are sometimes supplemented by profit-sharing plans, which tie an annual pay supplement to some indicator of enterprise performance.

This trend towards moderation in wage agreements is continuing. The average rate of increase laid down in the agreements signed in the first six months of 1988 was 2.4 per cent, but this rate increases somewhat if profit-and gain-sharing schemes are taken into account. A private survey held in 1988 showed that 29 per cent of the employers asked wanted to keep the increases for 1989 down to 2 per cent or under. Gain-sharing plans are becoming increasingly sophisticated as employers learn from their mistakes, but nevertheless still play a minor role. In some plants, the establishment of semi-autonomous work groups has been accompanied by pay-for-knowledge arrangements, which award employees according to the number of skills learned. Experts estimate that the use of these types of arrangements, including profit-sharing, employee shareholding, and various other incentives, has increased tenfold in the last ten years.

Functional flexibility

In *Australia*, the 1987 report by the National Labour Consultative Council and the 1988 government programme on Labour Market Reform emphasized the need for and the instruments to achieve functional flexibility. The following aspects are highlighted: adequate training facilities to reach the necessary qualification and requalification levels; an awards structure which incorporates appropriate differences in classifications and pay structures between industries and enterprises and justified differentials between categories of employees within the enterprise; and efficient machinery to deal with demarcation issues or matters of common interest to the various unions at enterprise level.

Under the two-tier wage system, government, unions and employers have together launched a number of significant measures, including greater flexibility in the working day, multiplication of skills and less rigid divisions between occupations.

There is also a marked emphasis on restructuring awards, and a number of negotiations are under way. In the metal-working industry, for example, the number of classifications is to be reduced from 300 to 8 and a new system of training and qualification incentives is to be introduced. The new wage system will make it easier to apply these

measures more generally, to develop career paths and to eliminate restrictive labour practices.

At national level in *Belgium* there are a number of measures related to training, both for general application and specifically for young people, which act as instruments of functional flexibility. They include, for young people: extension of compulsory school attendance to 18, an industrial apprenticeship contract between the ages of 16 and 18, part-time training between 18 and 25, the requirement that enterprises with more than 50 employees take on trainees up to a limit of 3 per cent of their staff, introduction of a "middle class" apprenticeship contract, adult vocational training measures enabling job seekers and employees to train for a profession or to update or upgrade skills, etc.

The duties performable by the employee are specified in the work contract and an employer is given little flexibility to change on his own initiative the duties of an employee belonging to a professional category, since, apart from a degree of latitude in the tasks to which poorly qualified workers can be put, any significant change in an employee's duties can be regarded by him as termination of his contract by the employer.

In *Finland*, the establishment of joint project teams in areas where major changes are occurring is authorised by rationalisation agreements. Their use has become much more common and studies in shipbuilding and the paper industry show that they are considered to be a useful form of collaboration between employers and employees.

In industry, the use of multiskilled team work has also become more widespread. In 1988, job structures in the public sector have been simplified and made more flexible; *inter alia*, tranfers of civil servants to other posts were facilitated.

The value of multiskills is emerging in *Ireland* in the area of plant maintenance. Negotiations with the craft and general unions involved seems to be necessary to achieve this, as well as a training programme which not only meets technical requirements, but also takes account of industrial relations sensitivities about demarcations, etc.

In *Japan* functional flexibility seems to be the rule: transfers within and between enterprises are common and no strict definition is attached to a job or a qualification. For further detail, see the recent OECD publication *Japan at Work: Markets, Management and Flexibility* (Paris, 1989).

In *Portugal* a number of employers are trying to ensure that their workforce is multiskilled and can easily be reassigned, but run into determined resistance from both employees and their unions. Nevertheless, since the labour market is not favourable to employees, they have apparently accepted the situation in a number of cases. This trend is, furthermore, undoubtedly associated with an increased and improved vocational training capacity.

The view in *Spain* is that promoting flexibility without ensuring that it is accompanied by vocational training measures can cancel out its beneficial effects and entail very harmful social consequences. A new training plan is therefore being developed to adapt vocational training to the changing needs of the production system. It includes financial aid for the training of newly hired young people, aid to promote investment by enterprises in this field, aid for the establishment of public or private programmes, etc. This training plan is administered by the government together with the social partners.

As regards flexibility for employers to ask workers to perform duties in different professional categories, it seems that the legal possibilities are fairly wide-ranging but as yet little used in collective bargaining.

The vocational training system in *Switzerland* is based on the training of apprentices directly in enterprises. A falling birth rate and technological change have resulted in a marked shortage of manual workers and trainees in some sectors. Government and industry

are planning improvements to the vocational training and continous training system so as to remedy this situation.

In the *United States*, although functional flexibility, interpreted as the right to ask an employee to perform tasks falling into various professional categories, has traditionally been an employer's privilege, it has frequently been lost in negotiation as labour organisations exercised job control unionism. The resulting collective agreements narrowly defined work tasks and rigidly codified job classifications and demarcations.

As late as 1980, 63 per cent of agreements covering 1 000 or more employees contained restrictions on work by personnel outside the bargaining unit. However, from the 1950s on, employers in the transport industry have become determined to ease the rules restricting the flexible use of employees and requiring overmanning of certain operations. These "job rights" were gradually bought up or abandoned as their beneficiaries left.

In manufacturing, too, the "productivity bargaining" of the 1960s began to erode certain aspects of job control unionism. Eliminating functional rigidities was a slow process, however, whilst their cost could be passed on to the consumer.

In the last ten years, international competition and the existence of non-union firms has speeded up the pace of this movement. Although no statistics are available on this point, there is believed to have been a general decline in the number of job classifications and a change in restrictive working practices, especially in the car industry, iron and steel and transport. For example, an electric galvanising plant has reduced the number of job classifications from 40 to 3 and instituted a pay-for-knowledge system in co-operation with the steel workers union. While changes of this dimension usually occur only in greenfield sites, a private institute has estimated that 200 enterprises are conducting experiments in the field of socio-technical systems, frequently with semi-autonomous groups.

III. CONCLUSION

The various national contributions present important conceptual differences which need be spelt out, since they not only represent certain strengths but also limit the extent to which conclusions can be drawn. For example, temporary or part-time work may be classified under external or internal numerical flexibility or under externalisation. The same applies to work sharing and other concepts.

This reflects not only differences of interpretation but a more profound issue. There are in fact no commonly accepted definitions of the main concepts connected with flexibility. Concepts covered by apparently similar terms used may therefore not be the same from country to country. The terms themselves are also rather nebulous in some cases. For example, the Brunhes report distinguishes between temporary work (which it classes under external numerical flexibility) and the temporary hiring of workers (which it classes under externalisation). These two concepts are, however, often identical, even though some countries seem to distinguish the hiring of outside staff from temporary hiring, itself subsumed under temporary work. The reason for this clearly lies in the fact that legal systems and institutional practices vary from country to country.

The underlying problem is, of course, to know whether concepts which are barely comparable can justifiably be classified into the main categories of flexibility and thus whether these categories are useful working tools or not.

A number of conclusions can nevertheless be drawn.

- It is evident that pressure for greater flexibility in industrial relations is now being felt in all OECD countries. On the whole, the country contributions show that the mechanism shown to operate in the United States [Kochan, Katz and Mckersie (1986)] is found to a greater or lesser extent in all countries; as a result of the impact of increased global competition, in particular though not only from the newly industrialising countries, the shorter product life cycle and growing uncertainty regarding economic developments, employers feel a greater need for flexibility.

  It should be noted that the methods used to introduce this flexibility vary considerably between countries where the trade union movement has remained strong (Australia, Austria) and those where its influence has receded (France, United States, United Kingdom). This is the case irrespective of the national practice – be it legislation or collective bargaining – which traditionally prevails in shaping industrial relations.

- It seems clear that these trends take different forms in different countries. Each has a different and influential set of industrial relations characteristics, of traditions and social structures such as the education system, hierarchical relations, etc. Apart from the significance of each of these factors taken in isolation, it should also be noted that they interact and that their overall structure induces varying reactions to a possibly similar initial impact. A few examples will suffice to show this. In countries with a tradition of job control exercised by unions, for example, restrictive working practices are a fundamental challenge to the introduction of flexibility, whereas in other countries they are unimportant. Legislative guarantees of job security, likewise, play a fundamentally different role from country to country in the process of increasing external numerical flexibility.

- The impact of the different types of flexibility will be felt differently in each country according to its traditional cleavages and not in homogeneous fashion. Where part-time work or fixed-term contracts are mentioned, for example, it is noted that their use is expanding mainly in the industries where they are traditionally found (forestry and construction in Finland), whereas they are declining in other sectors (retail distribution in the United States), instead of spreading homogeneously throughout the economy. The effect of specific national features can also be seen in Spain, where the ban on temporary employment agencies is one of the factors explaining the growth in part-time work and fixed-term contracts. Furthermore, if the growth of these types of flexibility is marked and indeed strong in some instances (fixed-term contracts in Portugal or part-time work in the United Kingdom), in others it exists but remains limited in scope.

- It is not systematically clear that numerical flexibility represents a deliberate policy choice by employers. Sometimes, the number of flexible-contract workers simply increases in line with the growth of the economy (in Spain, for example, the number of fixed-term contracts has grown with the increase in overall employment) or with demographic trends (part-time work in Canada, Switzerland and Ireland). In contrast, certain cases suggest that it may be the impact of a lack of qualified manpower due to training deficits or demographic developments that has put the spotlight on functional flexibility.

Finally on this point, recourse to some numerical flexibility or externalisation practices may very well not be the consequence of human resource management strategies, but the consequence for these management strategies of other strategic choices upstream in the product, market or financial strategy domains. This aspect is of course little documented in the national contributions summarised above, which focus on industrial relations. A further example is worth noting: many medium-sized or large enterprises have, in the more unsettled competitive climate of recent years, chosen to concentrate on their specific field, i.e. their fundamental and distinctive area of expertise, whether this is a technological process, a product, a field of know-how or an area such as marketing or distribution. This choice may very well have led them to give up other activities which they now consider are best done by others with more relevant expertise. This may have been reflected in externalisation or numerical flexibility as well as in functional flexibility.

Limited evidence on this can, furthermore, be drawn from the national contributions: thus, subcontracting in Spain and the United States is concentrated in activities (cleaning, security services, data processing, systems analysis) which a number of enterprises used to perform themselves without being specialised.

- The segmentation of the labour market does not appear necessarily to be a direct consequence of external numerical flexibility and externalisation. The country contributions do not show that employers need to choose between a dual labour market and a queue of job-seekers on a single market. As the cases of Spain, the United States and the United Kingdom show, membership of the contingent labour force can serve as a prelude to permanent employment.

  The cases of the United States and the United Kingdom show that where there is a degree of segmentation, it does not lead to a split labour market, but to a more complex model in which different groups of employees occupy varying positions with regard to wage rates, job security and social benefits. Furthermore, "externalised" employees can be highly qualified and well paid, and it is possible to find "permanent" employees whose pay and social benefits are very poor.

  Similarly, the concentration of some forms of employment in particular demographic groups tends to prove that in a number of cases this multi-segmentation helps some people to join the labour force (students and schoolchildren making up most of the temporary workforce in Finland, part-time employment growing with the number of single-parent families, working wives in Canada, etc.). The idea of a two-tier society is certainly alarming and in some other cases there are indications that some individuals have had to fall back on forms of employment which they did not want; nevertheless, it cannot be deduced directly from the data summarised above or extrapolated as a global trend.

- It seems equally difficult to apply the contrast between short-term and long-term flexibility generally to a whole set of countries. A number of instruments (e.g. externalisation) can be common to both types of flexibility, and employers can combine the two in their manpower strategies. (On this basis, short-term flexibility would be defined as the ability to respond immediately to unforeseen demand fluctuations by means of human resource deployment, and long-term flexibility as the ability to manage human resources in such a way as to be able to adapt to expected developments.)

It is likewise possible to imagine the continuation of short-term functional flexibility based on geographical mobility or the abandonment of restrictive practices and a long-term functional flexibility based on training designed to facilitate mobility between jobs. This would, however, require the removal of the constraints of job control unionism and consistency in training standards between firms.

It is clear that the choice and mix of flexibility options is not the sole responsibility of employers, who cannot simply choose freely between rapid adjustment of their workforce size, more highly qualified employees, externalisation, etc. Their decisions depend on the national education system (for both initial and continuous training) in which they operate, and the pressures applied to them, including government employment policies and trade union structures and demands.

- It seems that legislative pressure to apply functional flexibility options and to ban or severely restrict recourse to numerical flexibility runs the risk that an "informal" sector might develop on the fringe of the law if the legislative requirements are too restrictive. The workers on this black or grey market, being somewhat outside the law, could thus be denied all social protection.

  Excessive regulation may, under certain conditions, force some economic activities out of the regulated sector into a completely clandestine sector, either because labour costs are too high to match foreign competition or because the industrial relations structures or traditions of the sector encourage this. The development of the non-unionised sector in certain industries (e.g. construction) and in certain regions of the United States is an example of this type of development.

- The national contributions highlight the often overlooked significance of wage flexibility. This is shown to be not simply a matter of individual wage-setting or the establishment of a link between wages and enterprise performance or wages and individual performance; the general view of these practices (with some reservations, for example, on the part of the United States) seems to be that their influence as flexibility instruments is limited, their main purpose being to motivate employees to work harder.

  However, other aspects of wage flexibility are felt to be significant, particularly the "de-indexation" agreements, the alignment of wage agreements on labour force requirements or the growth of the economy (United States, Japan), the role which wage differentials play in collective agreements in promoting employee mobility between industries or qualifications (Germany) and the use of "wage drift" to move from centralised to decentralised wage setting (Finland).

Finally, and perhaps most significantly of all, we think that two hypotheses can be formulated on the basis of previous work done which have been confirmed by the national contributions outlined above.

First, the need for flexibility is not in itself new: flexible employment practices have existed for some time. What is new is the reason why employers are now seeking greater flexibility than ever before. Two converging trends are undoubtedly largely responsible [Rojot (1987)]: the increasing share of the economy taken up by services, where voluntary co-operation by the employee is essential to the success of the enterprise, and, perhaps more important still, the massive introduction of new technology which reintroduces a degree of flexibility into what had been an immutable production law: the inverse relationship between product variability and productivity [Rojot (1986)]. However, this technical flexibility calls for workforce flexibility, which has a twofold aspect: it must be *quantitative* in

order to adapt to production volume and product and demand variability and to the new relations between suppliers and subcontractors (just-in-time production, zero stock method, etc.) and it must therefore apply all the corresponding instruments; but it must also be *functional*, since it requires the availability of an adaptable workforce with the new qualifications required to operate the new technology. There is no longer any need to draw up job definitions and to ensure their correct performance by means of sanctions and rewards; work is too complex – or too vague and wide-ranging – to be described in terms of what must and must not be done; instead, what is needed is the voluntary co-operation and full initiative of the employee.

Furthermore, as employers have often remarked [Rojot (1987)], robots cannot yet work on their own, but need men to make them work; if these men do not want them to work, there are any number of – often undetectable – ways in which they can prevent them from doing so. It is widely recognised that an absolute condition for the successful introduction of new technology in a production site, for goods or services, is the co-operation or at least the acceptance of the workforce. This factor, together with the increasing importance of services in the economy, shows the need for management strategies involving greater participation by the workforce. There are now a number of indicators that this is taking place.

It is therefore clear that management strategies for greater employee involvement are incompatible with the more extreme forms of internal and external numerical flexibility and externalisation. Voluntary co-operation and active participation by employees in the enterprise cannot be maintained in the face of collective redundancies, authoritarian changes in shift-work or working hours, or externalisation. Voluntary co-operation can neither be purchased nor imposed. The need for flexibility with regard to new technology therefore acts both as an incentive for and a restriction on numerical or short-term flexibility. For this reason, flexibility should not be examined as a separate issue, but jointly with technological change, employee participation and initiatives to boost productivity.

The second hypothesis, which stems directly from the country contributions, is that flexibility cannot be studied separately from an analysis of the education and training systems of the countries in question. In the discussion of functional flexibility, constant reference is made in all the countries to the importance of training, which is a major concern in most cases. This type of flexibility is based on the fundamental role of the training system. It cannot be analysed without a knowledge of the national education system, both formal and informal, initial and continuous, and of the content of these types of training, involving both the division between theory and practice and the qualifications on which functional flexibility is based. In the United Kingdom, for example, the importance of initial training for successful integration into the labour market is shown to be fundamental. Any analysis of functional flexibility needs to take into account the role of general qualifications (ability to learn, etc.), specific and technical qualifications and the behavioural characteristics which help workers adapt to changes in the world of work.

BIBLIOGRAPHY

ATKINSON, J. (1985), "Manpower Strategies for Flexible Organisation", *Personnel Management*, August.

CAIN, G.C. (1976), "The Challenge of Segmented Labor Market Theories to Orthodox Theory: A Survey", *Journal of Economic Literature*, December.

DOERINGER, P.B. and PIORE, M.J. (1971), *Internal Labor Markets and Manpower Analysis*, Lexington, Mass.: D.C. Heath and Co.

KOCHAN, T.C., KATZ, H.C. and MCKERSIE, R.B. (1986), *The Transformation of American Industrial Relations*, New York: Basic Books Inc.

MARSDEN, D. (1988),'Institutions and Labour Mobility: Occupational and Internal Labour Markets in Britain, France, Italy, and Western Germany', paper prepared for the AIEL/IEA Conference held in Venice on "Markets, Institutions and Co-operation: Labour Relations and Economic Performance", October.

MAURICE, M., SELLIER, F. and SILVESTRE, J.J. (1979), "La production de la hiérarchie dans l'entreprise: recherche d'un effet sociétal", *Revue française de sociologie*, vol. XX, pp. 361-365.

PIORE, M. (1975), "Notes for a Theory of Labor Market Stratification" in Edwards R. *et al.* (eds.) *Labor Market Segmentation*, Lexington, Mass.: D.C. Heath.

POLLERT, A. (1987), "The 'Flexible Firm': A Model in Search of Reality (or a Policy in Search of a Practice)?", *Warwick Papers in Industrial Relations*, No. 19, December.

ROJOT, J. (1986), "Employers' Response to Technological Change", report submitted to the 7th World Congress of the International Industrial Relations Research Association, Hamburg, 1-4 September.

ROJOT, J. (1987), "Accords collectifs et flexibilité de la main-d'œuvre", *Les cahiers de la Fondation Europe et Société*, No. 4, January.

SAGLIO, J., (1987), "Décisions technologiques et relations professionnelles; quel niveau d'analyse pertinent?", Journée de l'AFERP du 27 mai 1987: *Mutations technologiques et relations professionnelles*.

WORKER PARTICIPATION IN TECHNOLOGICAL CHANGE

by
Wolfram Wassermann

I. INTRODUCTION

The implementation of new technology and the accompanying work design in plants and offices is a relatively new field of labour-management dialogue. Before the 1970s, technical work design was generally considered to be a management prerogative, left largely untouched by labour unions which tended to react to initiatives from management and focussed instead on measures to protect workers against the effects of rationalisation.

The experience of the structural crises of the 1970s and the accelerated introduction of computer technology in the 1980s have led unions to demand early involvement in the selection and introduction of new technological equipment in order to have a say in the ensuing job design and work organisation, and in order to counteract possible adverse consequences, such as redundancies and deskilling. The international overview that follows shows that this reorientation of labour unions is not restricted to a few countries, but has become a generalised phenomenon in the OECD area.

The overview also demonstrates the complex interrelationships that exist between an individual country's industrial relations structure and the application of new technologies. Influences may go in two directions: first, existing structures of work relations may influence the smoothness, velocity and direction of technological change; second, new technologies will have a varying impact on the organisation of work, skill requirements, hierarchical structures and the degree of co-operation or conflict between management and employee representatives.

The new technologies tend to increase the range of options for the set-up of work organisation. There seems to be strong evidence of a departure from the Taylorist paradigm, characterised by high compartmentalisation of work tasks and worker distrust. Greater decentralisation of organisational structures, small, partly autonomous work groups, and new aggregations of tasks are becoming increasingly important means to ensure innovation in products and production processes.

On the other hand, there is a risk that information technologies bring about unprecedented levels of control over employees. Data-processing techniques may be used to monitor personal performance, thus producing the "transparent worker" and further concentrating bargaining and decision-making power in the hands of management.

Against this background the country-by-country overview that follows shows the current status of worker participation in technological change in OECD Member countries. It is based in large part on responses by Member countries to a request for information on

legislative changes, collective bargaining agreements, arbitration awards and workplace provisions.

II. NATIONAL DEVELOPMENTS

Sweden

The legal framework for employee participation rights is the 1976 "Co-determination Act". Employers are obliged to provide timely notice to local trade union representatives of any major changes planned in the firm and to negotiate them. In 1977 the Act was implemented by a "co-determination agreement" applicable to the public sector and to co-operative enterprises. A similar agreement, the "Development Agreement", became applicable to the private sector in 1982. These agreements set out, in general terms, the basic rules governing the notification and participation of employees in the introduction of new technologies. The agreements do not limit the issues that may be negotiated by the parties. Employee representatives have veto power in only a few cases, for example in the use of casual labour hired from external firms or manpower agencies. If the parties fail to agree about a particular technical or organisational change, arbitration is provided for. Consequently, although the employees have no formal means of blocking specific rationalisation projects, they have some measure of influence on the planning and implementation process.

"Safety Committees", with joint representation at plant level, play an important role in Sweden. Their rights, originally established in the 1974 "Working Environment Agreement" between the Employers' Association (SAF) and the umbrella organisation of labour unions (LO/PTK) were given legal form in the Working Environment Act of 1978 and were further extended in 1983.

Technical changes in the public and private sectors are accompanied by numerous public research and development programmes, which seek to design technical and organisational model solutions. They include, above all, the *Arbetsmiljöfonden* (Work Environment Fund) that carries out pilot projects within such interdisciplinary research programmes as "MDA" (People, Computers, Work) and "LOM" (Management, Organisation, Co-determination) which contain the special aim of developing non-Tayloristic organisational structures.

Two features characterise the Swedish model for the introduction of new technology. First, the obligation to provide early information and to actively seek worker participation usually leads to the formation of special *project groups* at plant level, whose members, representatives of employees and employers, participate in the technical and organisational changes. Second, both employers and employees have access to intra-firm research and to external consultants. Collective bargaining agreements ensure that local trade union representatives can retain outside consultants at employers' expense in order to secure professional support concerning the introduction of technological change.

Finland

The "Co-operation within Companies" Act, amended in 1989, outlines Finnish workers' participation rights in the private sector. Possible employment effects of technological

change – such as dismissals, lay-offs, transfers to part-time jobs and changing skill requirements – must be addressed co-operatively in connection with the purchase of machinery and equipment. If proper procedures are not followed, employers may be obliged to pay compensation to wage-earners affected by changes.

Details of worker participation in the introduction of new technology are determined by three collective bargaining agreements concluded in 1986 and 1987 between the Finnish Employers Confederation (STK) and the main trade union organisations (for white collar, blue collar and technical employees). The general objective of these agreements is to ensure the competitiveness of enterprises while simultaneously maintaining a good working environment and stable employment. The agreements recommend early notification and the set-up of joint project teams to promote discussions between management and employee representatives about rationalisation plans. These teams usually include representatives of those employees whom the changes will affect; they have no formal decision-making power. The agreement with the Confederation of Technical Employee Organisations provides that the particular expertise of technical employees should be taken into account in firms' planning processes. In addition, two of the agreements set out principles for pay arrangements.

Special agreements have been concluded in particular sectors. The paper industry, for example, is governed by an agreement which obliges both employers and employees to enter special negotiations at plant level. Thus, local labour unions can negotiate pay issues in connection with technological change. However, it has been noted that, to date, the local labour unions have in practice directed their efforts primarily to obtaining income and employment security. Questions of work design and the working environment have rarely been raised.

Germany

The 1972 Works Constitution Act outlines worker participation rights in the introduction of new technology. Employers are obliged to provide timely notice to the works council of all technical and organisational changes and to consult with the council about any social consequences these may have. In general, the works council has no power to prevent any planned change. If, after rationalisation measures have occurred, the work load for certain jobs is shown to have increased substantially, it can, however, renegotiate technical or organisational change.

If systems for the monitoring of personal performance are to be introduced, works councils have a right of co-determination: no such systems can be introduced without their consent. In practice, works councils try to influence the operation of such systems by concluding special agreements at plant level which prevent the data being misused to the detriment of employees.

Amendments to the Works Constitution Act during 1989 have slightly improved employee participation rights concerning the introduction of new technology. While the trade unions' demand for a clause which would have made the introduction of new technology dependent on the works council's agreement was not incorporated, rules for the timely disclosure of information and for consultations with the works council were made more specific.

There exist few regional or sectoral collective bargaining agreements. In 1987, a collective agreement on working conditions around data-processing equipment was concluded for government employees in the state of Hesse. It contains health protection

regulations for VDU work, income protection provisions, and limited protection against dismissals. If data-processing technology is to be introduced, personnel representatives must be consulted sufficiently early for them to be able to formulate their suggestions at the planning stage.

New agreements incorporating protection against rationalisation measures were concluded in 1988 in the textile and clothing industries. Those arrangements have extended statutory information disclosure requirements and participation rights. A right of co-determination for technical changes was not included, but measures covering skill formation and wage security were successfully negotiated.

Some larger enterprises have concluded firm-specific or plant level agreements, which extend protective and participation rights. Volkswagen, for example, has incorporated a protective stipulation which prevents the dismissal of employees because of rationalisation measures. In addition, skill formation is provided for employees who have to transfer from their jobs due to technical change.

Direct worker participation in technical design at shop floor level is not provided for in collective bargaining agreements or legislation. Where employee project groups or quality circles exist, they have, as a rule, been initiated by employers.

The Netherlands

Works councils have well-developed information and consultation rights with respect to technological change. They are entitled to any information which they may reasonably require to perform their functions. They also have the right to request consultations on a particular issue. In such a case the employer is required to formally notify the works council of his proposed course of action. During the consultations no decision may be taken.

Recent research shows that members of works councils tend to feel that they receive information too late in the decision-making process, limiting thereby their possibilities to influence the outcome of management's decisions.

A recent survey covering technology agreements shows that 58 of the 85 collective agreements surveyed contained clauses with respect to the introduction of new technologies. Two types of agreements were identified: "procedural" and "content" agreements. Most agreements (50) were of the procedural type, providing for information and consultation. In 33 agreements content clauses had been agreed upon, dealing mainly with issues of further training.

Austria

The 1974 "Collective Labour Relations Act" specifies the works council's rights to participate in the process of technological change. A 1986 amendment considerably extended these rights. For example, works councils were given certain co-determination rights concerning the introduction of systems for the monitoring of personal performance. These changes, however, fell short of the expectations of the trade unions, which had demanded co-determination on all technical changes.

Since 1981, the printing industry has had an agreement for the application of integrated word-processing systems. It regulates questions concerning skilled workers' job and wage security, but does not empower works councils to co-determine the introduction of such systems. In the banking sector, a non-binding agreement was concluded which con-

tains recommendations concerning the notification of works councils of proposed changes, as well as wage security and further training.

Switzerland

While labour law does not regulate worker participation, some collective bargaining agreements provide limited worker participation rights, but generally not in the area of the introduction of technological change. The government has not addressed the issue since the 1970s, when an initiative for a plebiscite failed.

France

In 1982-83, the French Ministry of Labour amended collective bargaining procedures (*les lois Auroux*). The amendment was intended to reinvigorate regular negotiations and collective bargaining agreements between the parties. Since the reform was introduced, the number of agreements – national, multi-industry, regional and company-specific – concluded annually has risen considerably, and new bargaining areas have been opened up.

Relatively few agreements address new technologies. While in 1987/88 eighteen sectoral agreements were registered, the number of firm-specific agreements remains low. The 1987 national agreement for the metal industry, which has been serving as a "model" agreement, regulates the timing of notification to the works councils (*comité d'entreprise*) and their participation, as well as that of the firms' health and safety committees (*comité d'hygiène et de sécurité*). In addition, the agreement defines a number of general principles concerning working conditions, job content, and skill formation. Finally, the agreement provides for the temporary protection of wage rates for affected employees. Several of the firm-specific agreements in the metal industry which followed the national accord contain relatively precise regulations governing replacements, vocational adjustment, skill formation and the creation of new wage groups for work with computer systems. Presumably, a national agreement concluded in September 1988 for all industries and signed by the major employer and union federations (with the exception of the CGT) which sets up guidelines for negotiation will stimulate further development in this area.

One element of the work legislation referred to above was the formation of discussion groups (*groupes d'expression*) at plant level to provide for direct employee participation in new work design. These new institutions may be regarded as a response to the quality circles introduced by many firms. Today, several thousand firm-specific agreements regulate the operation of such discussion groups; however, management-initiated quality circles, where works councils and trade unions have no formal influence, seem to remain more prevalent.

Belgium

Worker participation rights are established by National Agreement No. 39. This agreement, concluded in 1983, is applicable to all private sector companies with more than 50 employees that plan the introduction of new technologies. If the new technology will have substantial repercussions on employment, qualifications, and working conditions, management is obliged to inform workers' representatives three months in advance of the

proposed change and to begin negotiating procedures. Information must be in writing and must address the potential social consequences of the change. If the employer fails to adhere to the prescribed procedure, dismissals in connection with work restructuring may be considered illegal.

According to a trade union survey, the national agreement has had only marginal influence on real decision-making structures in Belgian firms. In two-thirds of the enterprises management provides information so late that alternative strategies cannot be discussed. If there are any negotiations at all (which was the case in half of the firms surveyed) talks are concentrated on protecting workers against adverse consequences of rationalisation measures, while questions concerning work organisation are rarely raised [Hancke and Wijgaerts (1987)].

Spain

There is no special legislation on worker participation concerning the introduction and application of new technologies in firms. On the whole, the area is considered a management prerogative; there are, however, a number of legislative norms providing for consultation with workers' committees if management decisions lead to major modifications of working conditions or dismissals. Such provisions may be utilised in case of the introduction of new technologies. More specific requirements would have to be introduced in collective agreements. However, in the barely 10 years that free collective bargaining has existed, a variety of other issues (wages, job creation, etc.) has been stressed in negotiations.

Some large firms in the chemical industry have concluded agreements containing provisions regarding wage implications, employment security and the transfer of employees after technological change. Also in the chemical industry, a branch agreement contains provisions regarding the impact of new technologies on occupational safety and health. Recently, agreements have been reached in two newspaper companies and the telephone sector providing for further training after technological change. However, even in these few cases, no priority is given to labour-management participation in the process of technological and organisational change itself. It is, however, expected that the structural changes that will result from the establishment of the EC home market in 1992 will stimulate agreements around this issue.

Portugal

Worker participation in technological change is not legally regulated and collective agreements are just beginning to address the issue. Trade unions and workers' committees have confined their activities largely to limiting dismissals resulting from rationalisation measures. In recent years administrative intervention has led to a strengthening of the collective bargaining system which is reflected by a continuously increasing number of settlements. The major focus of collective bargaining has been on wage issues; in comparison, coverage of issues such as work organisation and health and safety is limited. However, in the years to come worker participation in technological change may gain in importance due to a dialogue which has recently begun between employers, trade unions and the labour ministry concerning the implications of intensified application of new technologies to the Portuguese economy.

Greece

There is at present no specific legislation on worker participation concerning the introduction and application of new technologies. However, there is some general protective legislation specifying the rights of worker representatives in the enterprise. A recent law of 1988 provides that an employer is obliged to inform works councils about certain changes he is going to make within the firm, i.e. changes in the legal form of the undertaking, expansion or reduction of the workforce and other issues including major technical change.

Works councils have to be informed of the employer's decisions before their actual implementation. However, there is no need for employers to negotiate or take into account dissenting opinions.

The United Kingdom

There is no legal framework for worker participation in the introduction of new technology in companies or administrative bodies. In the 1970s an effort to reach a tripartite agreement to regulate procedures for participation in the planning of changes at plant level failed. At the 1970 Trade Union Congress the unions launched a campaign for new technology agreements at local level. A large number of formal agreements have so far been negotiated; in addition, in many enterprises management holds informal consultations with union representatives and employees.

The response of the United Kingdom to the request for information emphasized that there is unlikely to be any government initiative on the issue. While the government stresses that it firmly supports worker participation as being in the best interests of both employees and employers, it also believes that firms must be allowed maximum room to manoeuvre in introducing technological advancements. Any intervention by government is regarded as inhibiting development. However, it is equally stressed that employees and employers share mutual interests concerning the introduction of technological change, and should establish adequate procedures for consultation.

An international comparative study indicates that even though the United Kingdom does not provide legally enforceable participation rights, British workers are not necessarily disadvantaged relative to workers in countries which do establish such statutory rights. In fact, British workers were found to have influenced the introduction of technological change to a considerable extent [Levie and Sandberg (1988)].

While no agreement to negotiate technical changes has been concluded at national level, there are currently several hundred agreements at plant and company level covering information provision, consultation, negotiation and joint decision-making. Such agreements are usually reached by collective bargaining; however, they tend to be concentrated in the white-collar sector and, as a result, often include only a minority of the workforce. On the whole, it appears that British managers prefer to negotiate on new technology together with general issues, rather than separately.

Ireland

The Worker Participation Act became law in June 1988. It requires the management of large public enterprises to establish sub-board participative arrangements, when requested by workers' representatives to do so. If management and unions agree, these

arrangements may be used as mechanisms for discussing the introduction of new technology. In private industry, a number of firm-level agreements commit the parties to co-operate in ongoing technical and organisational changes in day-to-day contact between management, workers, and trade union representatives.

The principal trade union federation has demanded a national collective agreement to ensure full disclosure of information about technological change, and called on its affiliated unions to strengthen and improve collective bargaining at plant level. In practice, however, decisions about technological change remain the domain of management. Trade union influence mostly begins only after the introduction and application of systems in the plant. To date, most agreements have involved questions concerning financial compensation for employees adversely affected by rationalisation measures.

The United States

Worker participation in technological change is not legally regulated. Precedents set by the National Labor Relations Board and the courts have tended to confine the scope of bargaining to the effects of management decisions – the decision itself is generally not negotiated. Yet even as concerns the effects of managerial policy, special importance has been given to questions of health protection and occupational safety, while the impact of technology on job security, skill protection and work organisation has been mostly treated as issues of secondary importance

A 1986 survey shows that only 25 per cent of collective bargaining agreements in American industry contain provisions restricting management-initiated changes in technology. The majority of such agreements provide only for early notification and consultation, but not for formal negotiations with trade unions.

One of the first agreements on new technologies was reached between the Ohio Bell Telephone and the Communications Workers of America (CWA) in 1980. It stipulated at least six months advance notice of major technical change, as well as the establishment of a Joint Technology Committee to institutionalise employee involvement.

Agreements between the United Automobile Workers (UAW) and major auto companies have been in the forefront of developments. Many UAW contracts have imposed on management the obligation to notify and consult with the local union before any new technology can be introduced. In addition, agreements between the parties provide for training and retraining programmes. An agreement between the UAW and a GM/Toyota joint venture company, which secures workers' rights to participate in innovation activities, has resulted in the plant in question becoming the most productive among all of GM's assembly facilities. An even more extensive participation agreement with the UAW has been concluded for the new GM Saturn plant, even before its establishment. The agreement stipulates *inter alia* that: "... the union will be represented at all levels of the organisation and will participate in all decisions at all levels.".

As concern about the rapid pace and substantial impact of technological change began to surface in the 1980s, the National Academy of Sciences convened a tripartite advisory panel to report on the probable effect of technological change on employment. In its final report, the panel concluded that "co-operation between labour and management is essential to plan the large-scale adoption of new technology" and that "management should not only give advance notice but consult with workers about job redesign and technological change". However, there remain, in practice, important pressures on both management and labour not to co-operate. Management often jealously guards traditional "management rights",

and many labour unions avoid becoming too intimately involved in joint decision-making, fearing they could compromise their independence and ability to challenge management.

Canada

Canadian labour law, both federal and provincial, has since the early 1970s provided protection for employees against the consequences of technological change. Employers planning technological change with potential consequences for working conditions and employment are obliged to so notify bargaining agents in writing. In some of the provinces, upon application, the Labour Relations Board (CLRB) or other boards may permit labour-management negotiations on this issue. In companies under federal jurisdiction which cover about 10 per cent of overall employment (such as Crown Corporations, banks and inter-provincial transportation), no technological change may be effected until an agreement has been reached. If negotiations fail, industrial action may take place.

Canadian legislation allows parties to choose between resorting to the legislative provisions or dealing with technological change during regular collective bargaining. In practice, technological changes are more often addressed in labour-management negotiations than through the triggering of the legislative provisions.

Australia

While a 1987 Senate Committee report concluded that consultation over new technology was "rare in Australia", the government promotes labour/management efforts to develop participation procedures, which it regards as an essential element of labour market reform.

Worker participation issues are dealt with both in arbitration awards and collective agreements. In 1984 a Conciliation and Arbitration Commission ruling in a metal industry dispute required the settlement between the parties to provide for consultation with employees in cases of major technological change, and decided that the notification and participation provisions were applicable immediately after the management decision had been taken.

The 1984 metal industry decision was a "test case" before the Conciliation and Arbitration Commission. Test cases are significant in that they establish minimum standards which the Commission can, on application, extend to awards in other industries. The case was particularly significant as it was the first occasion that employer responsibilities in respect of notification and consultation were included in awards.

A number of plant-level agreements in both the public and private sectors provide for consultation about technological change. Such agreements exist, *inter alia*, in the banking sector, and in the communications industry. An agreement in the public sector provides for timely information and consultation on technological change at all major project stages. In addition, it requires regulations on skill formation and staffing to be negotiated.

In 1988, industrial employers and the trade union federation released a Joint Statement on Participative Practices meant to encourage such practice on company level. It recommended early consultation with employees concerning workplace design, the development of new forms of work organisation and further training.

Japan

Japanese industry is well known for its comparatively rapid and smooth introduction and extensive diffusion of new, especially information technologies. Worker participation in such processes is based less on legal "rights" than on traditional practices of consensus-building, mostly prevalent in large firms. While workers have rarely opposed the introduction of new technology, their acceptance is not unconditional; labour unions will often seek to prevent redundancies and deskilling as well as regulate wage implications and the transfer and training of affected employees. Commonly, workers are consulted about technological changes in a variety of forms (workshop meetings, joint consultation bodies, production committees, etc.). In addition some participation of the trade unions is, as a rule, stipulated in collective bargaining agreements.

A 1985 Ministry of Labour survey explored whether employers had consulted with employees about the introduction of micro-electronic machinery. Twenty-two per cent of the companies replied that they had done so at workplace gatherings and other meetings; 26 per cent had addressed the matter in labour-management consultations. More than half, however, answered that they had not done anything particular [Kuwahara (1987)].

A 1986 survey on collective agreements used data from 5 000 local trade union organisations. In the agreements reported, the following specific items were regulated concerning the introduction of new technology:

- Early consultation in 39 per cent of the agreements;
- Re-allocations and transfers in 39 per cent of the agreements;
- Education and training in 35 per cent of the agreements;
- Employment security in 38 per cent of the agreements;
- Working hours in 44 per cent of the agreements;
- Safety and health in 42 per cent of the agreements.

Obviously, regulations governing small and large enterprises differ. Generally, the proportion of agreements which regulate technological change issues more than doubles in large enterprises (those with more than 5 000 employees). Thus, while employment security was stipulated in more than 50 per cent of large enterprises, this was the case in less than 20 per cent of small companies (those with 50 to one 100 employees). Whereas in 56 per cent of large companies regulations for health protection were in place, this occurred in only 18 per cent of the small firms surveyed. A similar difference according to size of enterprise applied to prior consultation.

III. SIMILARITIES AND VARIATIONS

For European countries, the 1970s were a period of general labour law reform, with the most important changes taking place at the central political level (for example in Sweden, Norway, the Netherlands, Italy and Germany). The 1980s, by contrast, may be representing a phase of decentralised participation practices, albeit under different political and economic conditions. Whereas in the past working life reforms were linked with the promotion of industrial democracy, today the emphasis is on finding solutions for development

problems. The development of procedures for worker participation in technological change seems to be an important element in these solutions.

The various forms and levels of worker participation, ranging from information to consultation, negotiation and finally joint decision-making, reflect the different socio-political traditions and industrial relations structures in individual countries. Against the background of these differing national traditions, however, interesting similarities can be observed.

As a rule, the 1980s witnessed the growth of plant- or company-level agreements specific to the economic or technical situations confronted. Models for workers' participation developed thus at company level, occupational group level and sectoral level, by means of a multitude of separate, decentralised agreements. In several instances, it appears that the terms of these agreements are beginning to enter into general use.

Worker participation in technological and organisational decisions is a new field for trade union action. Traditional union practices appear to be changing as technologies and organisations change. New topics, such as work organisation, skill formation, job creation, and staffing have arisen which require new methods of bargaining. Result-oriented negotiations coexist with more process-oriented approaches.

The need for skill formation and employee involvement in technological questions is increasing both for professional union representatives and for workers at large. Institutional union representation (local union representatives or works councils) is often supplemented by new participatory bodies. Joint project groups at company level, work teams and the French *groupes d'expression* at shop floor level are examples of this new trend.

Legal frameworks for worker participation exist only in a few countries, primarily those with relatively centralised trade unions and generally co-operative industrial relations, such as Sweden, Austria and Germany. Even where such legislation exists, however, it addresses only selective aspects of technological change, such as the monitoring of employees' personal performance which is subject to co-determination in Germany and Austria. The effectiveness of the legal frameworks depends customarily on more specific collective bargaining agreements at sectoral, regional, and plant level, as can be observed in Finland and Sweden. In Canada, legislation may be overridden by union-management agreements at company level.

In France and Belgium, government initiative has resulted in general national agreements or declarations of intent between the central employee and employer organisations. These general agreements contain only minimum conditions concerning notification and consultation procedures, and it is unlikely that they will prove effective in stimulating participative practices unless they are supplemented and refined at sectoral level. By contrast, in Australia, a wide-ranging, top level framework followed models that originated in particular sectors.

Some countries report collective bargaining agreements at sectoral level (Sweden, Finland, Germany, France and Australia). These agreements largely represent isolated solutions peculiar to the sector in question, and cannot usually be generalised. Sectoral agreements are primarily procedural in that they regulate notification and participation rights. Sometimes they include provisions concerning retraining, compensation for dismissals resulting from rationalisation measures, or provisions designed to protect workers against dismissal.

Partly due to industrial action in the early 1980s, in the printing and newspaper industries issues of technology and personnel usage are often regulated by collective agreements, some of which include far-reaching protective measures for typesetters and printers, and minimum conditions for health protection concerning work at VDUs. Even in this

special case, however, the agreements do not provide for union participation at the planning stage of the introduction of new technologies.

As reported by Member countries, most technology agreements have been concluded at plant or company level. Where there are no central agreements setting out minimum requirements, such as in Portugal, Spain, the United Kingdom and the United States, these agreements appear to differ in depth. They range from socio-technical integration of parts of the workforce into rationalisation projects (an approach that tends to circumvent the trade unions), to models of full union participation in company decision-making.

IV. OBSERVATIONS

A comparative study concerning participation practices in Europe has shown that, while there was limited employee involvement outside the implementation phase, the participatory avenue, when pursued, did lead to gains for both parties. The following were among the preconditions listed for effective employee influence:

- "The terms of the problem should be sufficiently clear, and the available alternatives and options should be accessible and understandable";
- "The parties affected by the technological change should be aware of their mutual interest in reaching an understanding, and have the will to set up adequate procedures for participation";
- "Special 'forums' for dialogue should exist, or be set up, through which the parties can exercise their effective capacity to influence the process..." [Cressey (1987, pp. 16)]

A further key issue is competence: whether employees are given resources to consult outside experts on questions of technological change, and whether they have access to the firm's own expertise. If employees are expected to cope with the tasks that accompany participation, they must be sufficiently qualified and informed. Furthermore, if worker participation is regarded as a necessary element of successful modernisation and industrial development – as is stressed in most of the country reports – participation will have to be considered as central to the definition of "work". Employees' competence needs to be acknowledged as a crucial element in this process.

Strategies which count on the dissolution or weakening of trade unions as a side-effect of the introduction of new technology contain risks for company development. Union consent generally needs to be achieved if the productive potential of new technologies is to be realised fully and flexible forms of work organisation are to be developed. Such consent will often not be forthcoming if management offers participation only to selected groups of highly-qualified employees – it requires the co-operation of recognised, well-organised, qualified trade unions.

Finally, the countries' responses raise three sets of issues that deserve consideration. First, those trade union structures which separate traditional skill groups into competition with each other (as in the United Kingdom) will tend to inhibit employee participation in technological and organisational innovations. Also, local union structures which are oriented towards securing the interests of the longest-serving employees (as in the United

States) may be unlikely to hold their ground against the dynamic of change in organisation and qualifications. However, such substantive problems (which also appear, to a slighter degree, in Sweden, Finland and Germany) may stimulate initiatives for the reform of traditional trade union structures.

Second, given the universal spread of information technology, the trans-national dimensions of worker participation warrant exploration. This question is already on the agenda of the European Communities, but could well be considered in a wider international context.

Third, the figures from the Japanese report highlight a serious structural problem in the way participation practices have evolved. Most often it is the large enterprises that provide the examples of sophisticated participation agreements. The regulations introduced at Volkswagen, GM, or Toyota, have only little relevance to the problems of technology application in the millions of small and medium-sized enterprises where the majority of people work. Even where general participation rights are in principle applicable to firms of all sizes, the likelihood of these rights being exercised is considerably less in small enterprises. Thus, the future of worker participation could develop along two tracks, with large firms practising participative technological design, and numerous small enterprises pursuing a variety of Tayloristic – and therefore increasingly inappropriate – forms of work organisation when they introduce new technology.

BIBLIOGRAPHY

ARBETSMILJÖFONDEN (1988), *A New World of Work, The Swedish Development Programme*, Stockholm.

CRESSEY, P. (1987), "New Technology: an Overview of Regulation", in *European Industrial Relations Review*, No. 157, February, pp. 9-16.

EUROPEAN FOUNDATION FOR THE IMPROVEMENT OF LIVING AND WORKING CONDITIONS (1985), *The Role of the Parties Concerned in the Introduction of New Technology*, consolidated report, Dublin.

HANCKE B. and WIJGAERTS, D. (1987), *Information Technologies, Industrial Relations and Economic Democracy in Belgium*, working paper presented at the Conference on "Economic Democracy as a Political Idea" in Boston, Mass., TESA, Brussels.

KUWAHARA, Y., (1987), *High Tech and Policy; Trade Unions and Developing New Technology*, paper presented at the Joint Symposium on "High Tech and Society in Japan and the Federal Republic of Germany", Berlin, September.

LEVIE, H. and SANDBERG, Å. (1988), *On Trade Union Activity in Times of Technical Change - Some Thoughts on 20 European Case Studies*, paper presented at the Conference "Social Movements as a Force of Dealienation" in Dubrovnik, Arbetslivscentrum, Stockholm.

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